Test 1 On Unit 1

1 Choose the correct answer:

1) 135.42 + 100 = ... (13542 or 13.542 or 1.3542 or 1354.2)

2) $1\frac{1}{2} + \frac{1}{4}$ = ... (2 or 6 or $\frac{3}{8}$ or 12)

3) 225 + 25 = 2.25 + ... (2.5 or 0.25 or 25 or 2500)

4) 55.241 × 100 ..... 552.41 × 10 (> or < or =)

5) The number 276.532 ≃ ..... (to the nearest $\frac{1}{100}$) (280 or 276.6 or 276.53 or 276.54)

6) The smallest fraction is ..... ($\frac{1}{3}$ or $\frac{2}{5}$ or $\frac{5}{2}$ or $\frac{2}{9}$)

7) 24.24 + 242.4 = ... (10 or 0.1 or 0.2 or 1)

8) 572.4 cm to the nearest meter = ... (6 or 50 or 60 or 572)

9) $7\frac{1}{2} + 7.5$ = ... (zero or 1 or 2 or 3)

2 Complete:

10) 2.5781 ≃ ..... (approximated to the nearest hundredth)

11) $\frac{7}{80}$ ≃ ..... (approximated to the nearest hundredth)

12) 178.15 – 9 × 3.2 ≃ ..... (approximated to the nearest tenth)

13) $6\frac{1}{4} + 12\frac{1}{2}$ = ...

14) 26.274 + 23.28 = ... ≃ ..... (to the nearest $\frac{1}{100}$)

15) 39 days ≃ ..... (to the nearest week)

16) 1 – 0.999 = ... ≃ ..... (to the nearest $\frac{1}{10}$)

3 Answer each of the following:

17) **Find** the product of 23.49 × 4.2 and approximate it to the nearest hundredth.

18) A barrel has 236.25 kg of oil, if we want to pack it in bottles where each bottle contains 0.75 kg. **Find** the number of bottles.

19) **Find** the area of a rectangle of 15.5 meters length and 7.5 meters width.

20) A man bought a T.V. for L.E 2000, he paid L.E 440 in advance and paid the remainder by monthly installments each of L.E 32.5. **Find** the number of installments.

Test 2 On Unit 1

1 Choose the correct answer:

1) 609.25 ≃ 610 (to the nearest. .....) (unit or ten or tenth or $\frac{1}{100}$)

2) 37.5 × 10 = ... (3.75 or 375 or 0.375 or 3750)

3) 7.5 + $1\frac{1}{2}$ = ... (zero or 3 or 5 or 15)

4) The decimal form of the fraction $\frac{3}{20}$ is ..... (1.5 or 0.3 or 0.15 or 0.015)

5) 63.578 ≃ 63.6 (to the nearest .....) (10 or $\frac{1}{10}$ or 100 or $\frac{1}{100}$)

6) The quotient of 5.45 ÷ 0.5 = ... (1.9 or 1.09 or 19 or 10.9)

7) 2.7 × 3.5 ..... 0.27 × 35 (> or = or < or ≠)

8) 75.3 × 100 = ... (0.0753 or 7530 or 0.753 or 7.53)

9) 67.5 – 55.67 = ... (11.83 or 123.17 or 12.317 or 1.183)

2 Complete:

10) 6.35 + 17.025 ≃ ..... (to the nearest $\frac{1}{100}$)

11) (3.7 × 0.4) + 2.4 = ...

12) $2\frac{3}{4}$ + $1\frac{3}{8}$ = ...

13) The quotient of dividing 2.25 by 1.5 = ...

14) 12.5 + 7.632 ≃ ..... (to the nearest $\frac{1}{100}$)

15) 5.241 × 100 ..... 52.41 × 10 (put < , > or =)

16) 22.22 ÷ 2 = ...

3 Answer each of the following:

17) A family consumes 6.5 kg of meat monthly where the price of 1 kg of meat is L.E 145.
Find what the family pays, approximating the result to the nearest L.E.

18) Arrange the following numbers ascendingly:

$14\frac{1}{4}$, 15.025 , 14.375 , $14\frac{1}{8}$

19) **Find** the area of the square whose side length is 5.02 m. Approximating the result to the nearest tenth.

20) A truck can hold 125 boxes of oranges at a time, how many times are needed to deliver 4375 boxes by that truck? *(Damietta 2015)*

Test 1 On Unit 2

1 Choose the correct answer:

1) { 3 } ..... {1, 3, 5} (∈ or ∉ or ⊂ or ⊄)

2) {1, 2} ∪ {2, 3} = ... ({2} or {1, 3} or {1, 2, 3} or ∅)

3) 7 ..... {77, 17} (∈ or ∉ or ⊂ or ⊄)

4) {7, 3} ..... {1, 3, 5, 7} (∈ or ∉ or ⊂ or ⊄)

5) If {2, 3, 4} = {4, 3 x, 2}, then x = ... (1 or 2 or 3 or 4)

6) ∅ ..... {a, b} (∈ or ∉ or ⊂ or ⊄)

7) {1, 2, 3, 4} ∩ the set of prime numbers = ... ({2, 1} or {2, 4} or {2, 3} or ∅)

8) {4, 5} ..... {2, 3, 7} (∈ or ∉ or ⊂ or ⊄)

9) X ∩ X` = ..... (∅ or X or U or X`)

10) If {3, 4} = {1 + y, 4}, then y = ... (7 or 4 or 2 or 5)

11) 3 ..... {13, 303} (∈ or ∉ or ⊂ or ⊄)

2 Complete:

12) If 6 ∈ {3, 5, 2 x}, then x = ...

13) X, Y are two sets where X ⊂ Y, then X ∩ Y = ...

14) {2, 4, 6} ∩ the set of all factors of the number 2 equals .....

15) If X ⊂ Y, then X ∪ Y = ...

16) If X ∩ Y = ∅, then X and Y are .....

3 Find the result:

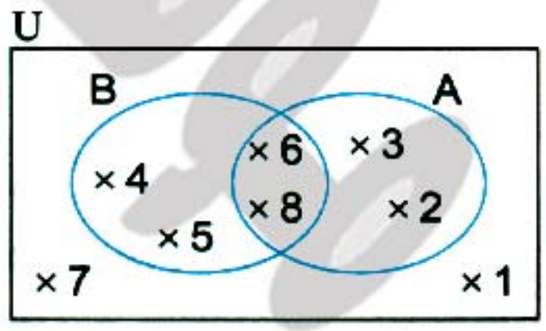
17) If the universal set U = {x : x is odd number less than 15}, X = {1, 3, 5} and Y = {1, 5, 9, 13}, then **draw** the Venn diagram which represents U, X, Y and **Find**:

a) X – Y b) Y`

18) **Look at the opposite Venn diagram and find:**

a) A ∪ B b) A – B = ...

c) (A ∪ B)`



19) Write all the subsets of the set {5, 7}.

.....

.....

.....

Test 2 On Unit 2

1 Choose the correct answer:

1) { 7 } ..... {2, 3, 5, 7} (∈ or ∉ or ⊂ or ⊄)

2) ∅ ..... {2, 3} (∈ or ∉ or ⊂ or ⊄)

3) {5, 3} ..... {5, 4, 3, 1} (∈ or ∉ or ⊂ or ⊄)

4) X ∪ X` = ..... (∅ or X or U or X`)

5) {7, 3} ..... {12, 73} (∈ or ∉ or ⊂ or ⊄)

6) If X ⊂ Y, then X – Y = ... (X or ∅ or Y or X`)

7) 3 ..... {2, 3} ∩ {4, 5} (∈ or ∉ or ⊂ or ⊄)

8) ∅ ..... {1, 0, 3} (∈ or ∉ or ⊂ or ⊄)

9) The number of subsets of {4, 5} equals ..... (2 or 3 or 4 or 5)

10) {3, 4, 5} – {1, 2, 5} = ... ({3} or {4} or {3, 5} or {3, 4})

11) {34} ∩ {4, 3} = ... ({3} or {4} or {34} or ∅)

2 Complete:

12) If X ⊂ Y , then X ∩ Y = ... and X ∪ Y = ...

13) For any set X then X ∩ X` = ..... and X ∪ X` = ...

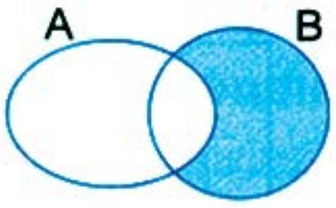
14) If {4, a, 9} = {10, b, 9}, then a = ... , b = ...

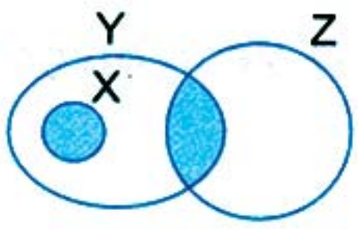
15) If {2, 3} ⊂ {4, 2, a – 6} then a = ...

16) If a ∈ X, then a ..... X`

3 Find the result:

17) Write what is represented by the shaded parts in the following figures using (∪ , ∩ , –):

a) 

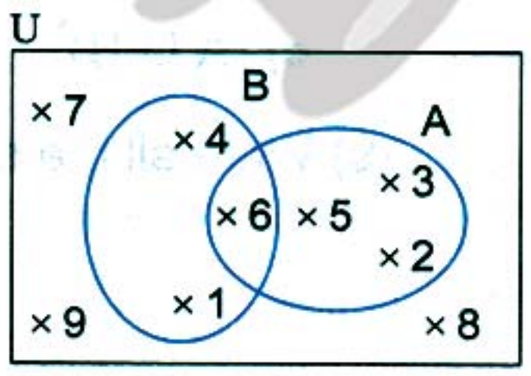
b) 

18) From the opposite Venn-diagram Find:

a) (A ∪ B)`

b) (A ∩ B)`

c) (A – B)`



Test 1 On Unit 3

1 Choose the correct answer:

1) The chord which passes through the center of the circle is called a ..... .

(diameter or radius or side or otherwise)

2) The longest chord in a circle is called ..... .

(radius or chord or diameter or otherwise)

3) The number of altitudes of the triangle is ..... . (zero or 1 or 2 or 3)

4) The length of the diameter of the circle whose radius length is 2 cm is ..... . (1 or 2 or 3 or 4)

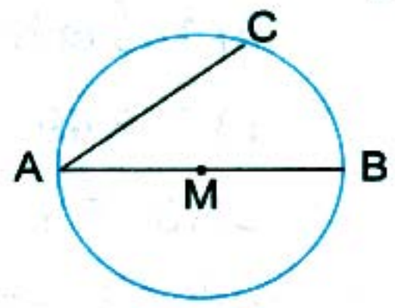
5) The altitudes of the obtuse-angled triangle intersect at one point ..... the triangle.

(inside or outside or otherwise)

6) In the opposite figure:

$\overline{MA}$ is called ..... in the circle.

(diameter or radius or chord)

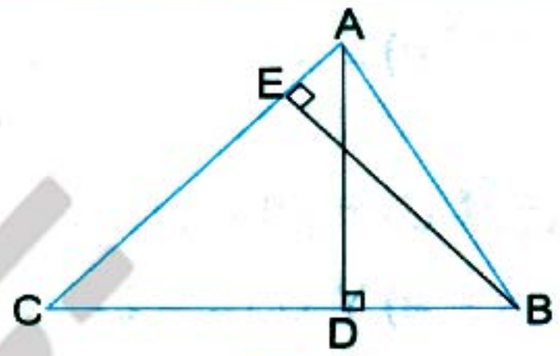


2 Complete:

7) In the triangle ABC

$\overline{AD}$ is the corresponding

altitude to ..... .

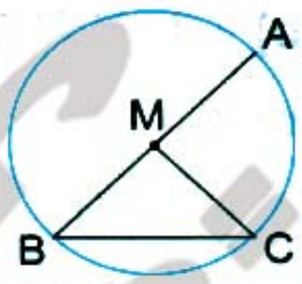


8) In the opposite figure:

a) ..... is called a diameter in circle M.

b) ..... is called a chord in circle M.

c) Each of $\overline{MA}$, $\overline{MB}$ and $\overline{MC}$ is called ..... in the circle.

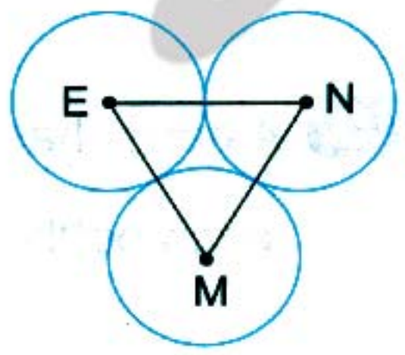


3 Answer the following:

9) Draw Δ ABC where AC = 6 cm, BC = 5 cm and m (∠ C) = 120°. Draw $\overline{AD} \perp \overleftrightarrow{BC}$, then find the length of $\overline{CD}$.

10) In the opposite figure:

Three circles of centers M, N and E of radius length 4 cm each, find the perimeter of Δ MEN.



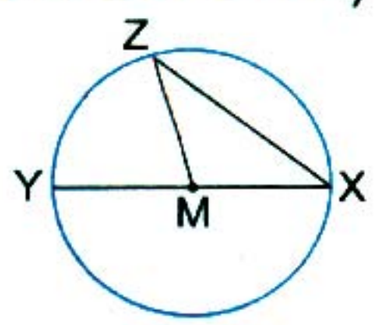
Test 2 On Unit 3

1 Choose the correct answer:

1) Any triangle has ..... altitudes. (1 **or** 2 **or** 3 **or** 4)

2) **In the given figure:**

a) ..... is the longest chord. ($\overline{XM}$ **or** $\overline{YM}$ **or** $\overline{XZ}$ **or** $\overline{XY}$)



b) If the radius length of circle M is 3 cm, then MZ = ... cm.

(6 cm **or** 4 cm **or** 3 cm **or** 2 cm)

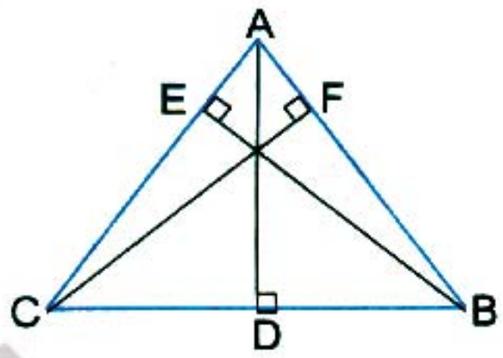
3) To draw a circle of diameter length = 5 cm we set the compasses with an open of ..... cm (2 **or** 3 **or** $2\frac{1}{2}$ **or** 5)

4) The altitudes of the right-angled triangle intersect at one point ..... the triangle.

(inside **or** on **or** outside)

2 Complete:

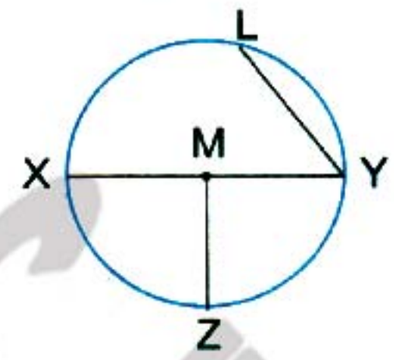
5) **In the opposite figure:**



a) The altitude $\overline{BE}$ corresponding to the base ..... .

b) The altitude ..... is corresponding to the base $\overline{BC}$.

6) **From the opposite figure:**



a) $\overline{YL}$ is called ..... in the circle.

b) IF XY = 8 cm, then MZ = ...

7) A circle of diameter length ..... cm, then its radius is 5 cm.

3

8) Draw the triangle ABC in which AB = 7 cm, BC = 7 and Ac = 5 cm.

9) Draw a circle M of radius length 5 cm, then draw the diameter $\overline{AB}$ and the chord $\overline{AC}$ of length 7 cm.

10) Draw Δ ABC where AB = 4 cm, BC = 6 cm and CA = 8 cm, then draw a circle of center B and its radius length = 4 cm, from the drawing complete:

a) The point A lies ..... the circle. **b)** The point C lies ..... the circle.

c) $\overline{AB}$ is called ..... in the circle.

Test 1 On Unit 4

1 Choose the correct answer:

1) When tossing a fair die once, then probability of the appearance of prime number = ... (1 or $\frac{1}{2}$ or $\frac{1}{6}$ or $\frac{1}{3}$)

2) A class has 40 students, 15 of them are boys. If a student is chosen randomly, then the probability of getting a girl = ... ($\frac{1}{2}$ or $\frac{5}{8}$ or $\frac{1}{4}$ or 1)

3) The probability of the certain event = ... (0 or 1 or $\frac{1}{2}$ or $\frac{3}{4}$)

4) The probability that the elephant flies = ... (1 or 0 or ∅ or $\frac{1}{2}$)

2 Complete:

5) If the probability of a student's success is 0.8, then the probability of his failure is ..... .

6) When rolling a die once, then the probability of having a factor of 6 = ...

7) When rolling a die once, the probability of appearance of the number zero = ...

8) In case of throwing a fair die once, then the probability of the appearance of a number less than 3 is ..... .

3 Find the result:

9) The following table shows a sample formed from 75 students in a school.

The game	Football	Handball	Basketball
Students	40	25	10

a) If a student is chosen randomly, find:

1) The probability that the student likes football.

2) The probability that the student likes handball.

3) The probability that the student likes basketball.

b) If there are 150 pupils, find the number of students who like football.

c) If there are 450 pupils, find the number of students who like basketball.

10) A bag contains 5 white balls, 9 red balls and 6 black balls all the balls are identical and equal in size. If a ball is drawn randomly, what is the probability that the drawn ball is.

a) white **b)** not white c) white or red

Test 2 On Unit 4

1 Choose the correct answer:

1) The probability of the impossible events = ... (∅ or zero or 1 or 2)

2) When tossing a fair die once, the probability of getting a number greater than 6 = ... (1 or 0 or $\frac{1}{6}$ or $\frac{5}{6}$)

3) When tossing a fair coin once, the probability of getting a head = ($\frac{1}{2}$ or $\frac{1}{4}$ or 1 or $\frac{1}{4}$)

4) The probability that the bird files = ... ($\frac{1}{2}$ or $\frac{3}{4}$ or 1 or $\frac{1}{8}$)

2 Complete:

5) If the opposite spinner is rolled, then the probability that the spinner stops at number 8 = ...

6) A fair die is rolled once, then the probability of getting a prime, non-even number = ...

7) If the probability that Khaled wins a game is $\frac{2}{3}$, then the probability of losing the same game is ..... .

8) When rolling a die once, then the probability of having a factor of 6 = ...

9) A letter is selected randomly from the word "Mohamed" then the probability of selecting letter m is = ...

3 Find the result:

10) A box contains 10 identical cards numbered from 1 to 10, a card has been selected randomly. Calculate the probability of selecting:

1) An odd number **2)** An even number greater than 6.

3) A prime number. **4)** A number divisible by 5.

11) The following table shows the evaluation of 20 pupils in one week.

The evaluation	Excellent	very good	Good
No. of pupils	4	5	11

Find the probability that a pupil is very good.

Summary of the important rules

Unit 1

1) $\frac{a}{b} < \frac{c}{d}$ if $a \times d < c \times b$ — i.e $\frac{2}{3} < \frac{4}{5}$ because $2 \times 5 < 3 \times 4$

2) $\frac{a}{b} > \frac{c}{d}$ if $a \times d > c \times b$ — i.e $\frac{6}{7} > \frac{1}{2}$ because $6 \times 7 > 1 \times 7$

3) $\frac{a}{b} = \frac{c}{d}$ if $a \times d = c \times b$ — i.e $\frac{3}{4} = \frac{6}{8}$ because $3 \times 8 = 4 \times 6$

4) Multiplying by 10:

Move the decimal point one place to the right $3.578 \times 10 = 35.78$

5) Multiplying by 100:

Move the decimal point two places to the right $13.179 \times 100 = 1317.9$

6) Multiplying by 1000:

Move the decimal point three places to the right $5.3491 \times 1000 = 5349.1$

7)
- To multiply by 0.1, move the decimal point one place to the left $173.5 \times 0.1 = 17.35$
- To multiply by 0.01, move the decimal point two places to the left $173.5 \times 0.01 = 1.735$
- To multiply by 0.001, move the decimal point three places to the left $173.5 \times 0.001 = 0.1735$

8) To multiply a mixed number by a fraction then, we first write the mixed number as a fraction

$$1\frac{2}{5} \times \frac{5}{6} = \frac{7}{5} \times \frac{5}{6} = \frac{7}{6}$$

9) To divide a fraction by another fraction, we change the second fraction to its reciprocal and multiply it by the first fraction $\frac{5}{9} \div \frac{2}{3} = \frac{5}{3} \times \frac{3}{2} = \frac{5}{6}$

10)
- To divide by 10, move the decimal point one place to the left as:

$$354.17 \div 10 = 35.417$$

- To divide by 100, move the decimal point two places to the left:

$$354.17 \div 100 = 3.5417$$

- To divide by 1000, move the decimal point three places to the left:

$$354.17 \div 1000 = 0.35417$$

11) The dividend:

= the divisor × the quotient + remainder

i.e. 37 = 9 × 4 + 1

$$\begin{array}{r|l} & 4 \\ 9 & 37 \\ - & 36 \\ \hline & 1 \end{array}$$

12) The set is a well defined collection of objects.

Unit 2

13) The types of sets are.

a) finite **b)** infinite **c)** empty

- The set {5, 2, 4, 0} is finite.
- The set of odd numbers is infinite.
- The set of whole numbers between 3, 4 is empty.

Unit 3

14) The radius of a circle is a line segment that joins between the center of the circle and any point on the circle.

15) The chord in a circle is a line segment that joins between any two points on the circle.

16) The diameter of the circle is a chord that passes through the center of the circle

i.e. $d = 2r$

17) The longest chord in the circle is the diameter.

18)
- The altitudes of an acute-angled triangle intersect at one point inside the triangle.
- The altitudes of an obtuse-angled triangle intersect at one point outside the triangle.
- The altitudes of a right-angled triangle intersect at one point which is the vertex of the right angle.

Unit 4

19) In a random experiment, an event is any subset of the sample space(s) of this experiment.

20) The probability of an event to be occurred = $\frac{\text{The number of the outcomes of this event}}{\text{number of all possible out comes (s)}}$

Pre-exam Final Revision

1 Complete the following:

a) If $4 \in \{2, x, 5\}$, then x = ...

b) If $6 \notin \{3, 5, x\}$, then x = ...

c) $(32.9 \times 100) \div 100$ = ...

d) $13.6 \div 100$ = ...

e) The length of the diameter of the circle whose radius is 6 cm is ..... cm.

f) The longest chord in a circle is called ..... .

g) The probability of the sure (certain) event is ..... .

h) The probability of the impossible event is ..... .

i) $X \cap X` =$ ....., $X \cup X` =$ ..... .

j) If $X \subset Y$, then $X \cup Y$ = ...

k) $1.0409 \simeq$ ..... . (to the nearest $\frac{1}{1000}$)

l) $\frac{5}{7} \times$ ..... = 1

m) $13\frac{3}{8} \simeq$ ..... . (to the nearest $\frac{1}{100}$)

n) 15.83×4.3 = ... $\simeq$ ..... . (one decimal place)

o) $(A`)` =$ .....

p) If $X = \{3, 5, 6\}$, $Y = \{7, 6, 8\}$, then $X \cap Y$ = ...

q) The altitudes of the obtuse-angled triangle intersect ..... .

r) $\frac{1}{2}$ day = ... hours.

s) $71.5 \div$ ..... = 7.15.

t) If $\{1, x + 2\} = \{5, 1\}$, then x = ...

u) $\{8\} \cap \{a\} =$ ..... .

2 Choose the correct answer:

a) $23.379 \simeq$ ..... . (to the nearest $\frac{1}{100}$) (23 or 23.37 or 23.38)

b) The probability of getting an odd number when tossing a die once is ..... .
(1 or $\frac{1}{2}$ or $\frac{1}{4}$)

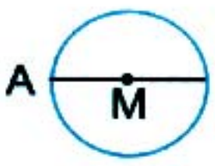
c) $\frac{2}{3} \times \frac{1}{2}$ = ... ($\frac{1}{2}$ or $\frac{1}{4}$ or $\frac{1}{3}$)

d) $\varnothing$ ..... {0} ($\in$ or $\subset$ or $\notin$ or $\not\subset$)

e) The three altitudes intersect at ..... point(s). (one or two or three)

f) If X = {a, b, c}, Y = {b, c, d}, then X – Y = ... ({a} or {a, b} or {a, c})

g) $1\frac{3}{8}$ ..... $1\frac{2}{3}$ (> or < or =)

h) In the opposite figure $\overline{AB}$ is called a ..... . 

(diameter or radius or chord)

i) {1, 2, 3, ..., 9} is called a/an ..... set. (finite or infinite or null)

j) If X = {1, 2, 3}, Y = {2, 3, 4}, then X ∩ Y = ... ({1} or {1, 2, 3} or {2, 3})

k) $\frac{1}{2}$ hour = ... minutes. (15 or 30 or 45)

l) Which of the following fractions is greater than $\frac{1}{2}$? ($\frac{4}{5}$ or $\frac{7}{15}$ or $\frac{6}{13}$ or $\frac{9}{22}$)

3 *Choose the correct answer:*

a) {3, 7} ..... {1, 3, 5, 7}. (∈ or ⊂ or ∉ or ⊄)

b) 355 ÷ 18 = 3.55 ÷ ..... . (1.8 or 18 or 0.18 or 1800)

c) The probability of the impossible event is ..... . (1 or 2 or 0 or ∅)

d) The smallest fraction is ..... . ($\frac{1}{3}$ or $\frac{2}{5}$ or $\frac{5}{8}$ or $\frac{2}{9}$)

e) 1.25 × 2.3 ..... 23 × 12.5 (< or > or =)

f) If the following fractions $\frac{4}{x}$, $\frac{5}{x}$ and $\frac{7}{x}$ are in their simplest form, then x = ...
(23 or 25 or 24)

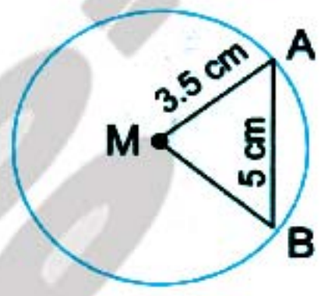
g) $\frac{2}{3} \simeq$ ..... . (to the nearest thousandth) (0.332 or 0.666 or 0.667 or 0.333)

h) The set of the prime numbers between 5 and 25 is ..... .
(a finite set or an infinite set or an empty set or not a set)

i) If M = {5, 2, 3} ∩ {1, 5} , then M ..... {2}. (∈ or ⊂ or ∉ or ⊄)

j) **In the opposite figure:**

If the radius of the circle M is 3.5 cm, $\overline{AB}$ is a chord and AB = 5 cm,
then the perimeter of the triangle MAB = ... cm.



(11.5 or 7 or 12 or 13.5)

4 *Find with steps:*

a) $\frac{3}{4} \times 6\frac{2}{3}$ = ...

b) $\frac{5}{12} \times \frac{4}{15}$ = ...

c) $\frac{7}{10} \div \frac{14}{15}$ = ...

d) $4\frac{1}{2} \div 1.5$ = ...

e) 15660 ÷ 435 = ...

f) $\frac{1}{2}$ of 40 = ...

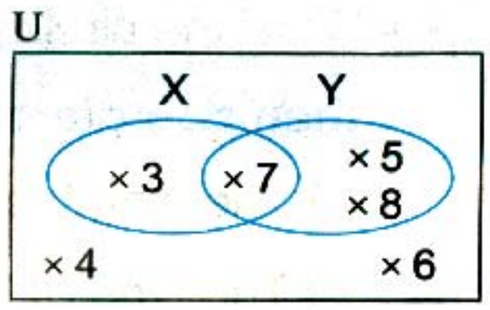
g) $10\frac{1}{2} \div 3$ = ...

5 ***Use the opposite Venn diagram to list:***

U = ... X = ... Y = ...

X – Y = ... Y – X = ... X ∩ Y = ...

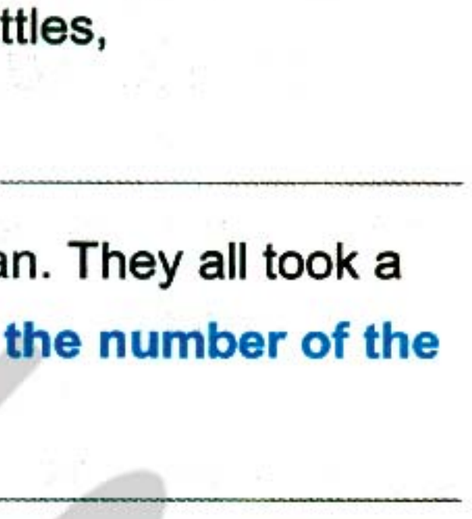
X ∪ Y = ... X` = .....  (X ∩ Y)` = ...



6 ***Using the opposite Venn diagram, complete:***

a) X ∩ Y = ... **b)** X ∪ Y = ...

c) X` – Y = ..... .  **d)** X` = ...

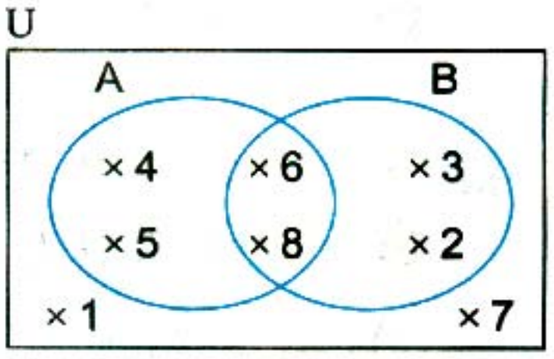


7 ***Using the opposite Venn diagram, complete:***

a) A ∪ B = ...

b) A – B = ...

c) (A ∩ B)` = ...



8 A container contains 23625 kg of oil, and we want to put it in small bottles, each of capacity 0.75 kg. **Find the number of bottles**.

9 A group of 1495 tourists reached Cairo Airport to visit Luxor and Aswan. They all took a train from Cairo Station. If each train carriage holds 115 tourists, **find the number of the carriages they got into**.

10 A box has 24 electric lamps, 3 of them were defective. If a lamp was drawn randomly, then **the probability of drawing a good lamp** = ...

11 What is the number that, if multiplied by 0.5, the result will be 33.86?

12 A man bought a TV set for L.E. 2000, he paid L.E. 440 in cash and the rest by equal monthly installments, the value of each is L.E. 32.5. **Find the number of installments**.

13 Draw the circle M with radius length 3 cm. Draw a diameter $\overline{AB}$ and draw $\overline{BC}$ a chord with length 4 cm, **then complete**:

a) The length of $\overline{AC}$ = ... cm. **b)**) The measure of ∠ACB = ...°.

c) The type of the triangle ABC according to the measure of its angles is ..... .

14 Draw the circle M with radius length 3.5 cm and draw the chord $\overline{AB}$ with length 3.5 cm, **then complete**:

a) The length of $\overline{MA}$ = ... cm. **b)**) The measure of ∠AMB = ...

c) The type of triangle AMB according to its side lengths is ..... .

---

15 Draw the triangle ABC in which AB = BC = 6 cm, m (∠B) = 120°, then draw $\overline{AD} \perp \overline{BC}$ to cut it at D, **then find the length of $\overline{AD}$**.

---

16 Draw the triangle ABC in which AB = 3 cm, BC = 4 cm and CA = 5 cm. **Draw its altitudes, then state the point of their intersection**.

---

17 Draw the circle M with radius length 3 cm and draw a diameter $\overline{AB}$ in it, then place the points C, D, H such that MC = 2 cm, MD = 5 cm, MH = 3 cm, **then complete**:

a) $\overline{MH}$ is called ..... .

b) $\overline{AH}$ is called ..... .

c) The point D lies ..... the circle.

---

18 A coin is tossed once, **find the probability of getting**:

a) A head **b)** A tail

---

19 A box contains 4 red balls, 5 blue balls and 3 white balls, one ball is drawn randomly.

Find the probability that the drawn ball is:

a) Red **b)** Yellow

---

20 If a die is tossed once, **calculate the probability of getting**:

a) A number greater than (6).

b) A number smaller than or equal to (6).

c) What is the name of each event?

---

21 A box contains 3 white balls, 7 red balls and 5 yellow balls. All have the same size if a ball was drawn randomly, what is the **probability that** .....?

a) the drawn ball is white **b)** the drawn ball is not red

Model Tests *as the Final Exam* from The School Book

Model 1

First *Choose the correct answer:*

1) The triangle in which the measures of its angles are 50°, 90° and 40° is called ..... triangle. (acute-angled **or** obtuse-angled **or** right-angled **or** otherwise)

2) $4\frac{1}{8} \times 2\frac{2}{3}$ = ... (1 **or** 10 **or** 11 **or** 111)

3) If {7,10} ⊂ {10 , x + 4 }, then x = ... (3 **or** 4 **or** 5 **or** 6)

4) 3.75 × 1000 = ... (0.375 **or** 0.0375 **or** 3750 **or** 37.5)

5) $\frac{1}{2}$ ▭ $\frac{1}{3}$ (< **or** > **or** = **or** otherwise)

6) The suitable symbol which expresses the shaded part in the following figure is ..... (X ∩ Y **or** X ∪ Y **or** Y ⊂ X **or** X ⊂ Y)

7) 55.241 × 100 ▭ 522.41 × 10 (< **or** > **or** = **or** otherwise)

8) $\frac{2}{3}$ × ..... = 1 (1 **or** 2 **or** 3 **or** $\frac{3}{2}$)

9) 43 days ≃ ..... weeks. (4 **or** 6 **or** 5 **or** 7)

10) Each chord passing through the center of the circle is called a ..... in the circle. (diameter **or** radius **or** side **or** otherwise)

11) {50} ..... {2.5 }. (∈ **or** ⊂ **or** ∉ **or** ⊄)

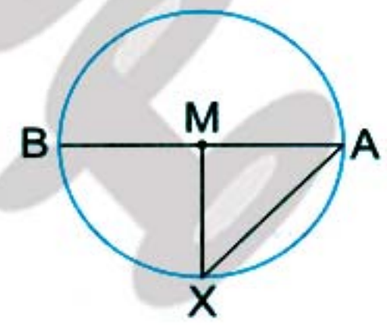
12) 12.3 × ..... = 1230 (10 **or** 100 **or** 1000 **or** 10000)

13) If Y = {2,4,6} ∪ {1,2,3 }, then 6 ..... Y (∈ **or** ⊂ **or** ∉ **or** ⊄)

14) $\frac{5}{8}$ ▭ 0.5734 (< **or** > **or** = **or** otherwise)

Second *Complete each of the following:*

15) **In the opposite figure:**



a) MA = ... = ...

b) The longest chord in the circle is ..... .

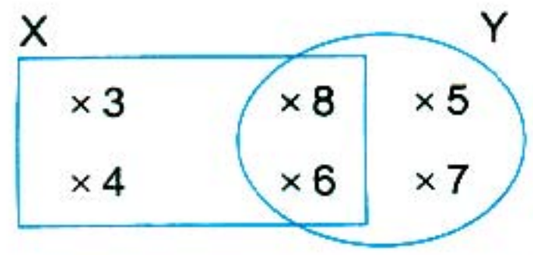
16) $\frac{4}{12} + \frac{6}{12}$ = ...

17) The probability of the certain event = ...

18) If $\frac{b}{8} = \frac{15}{24}$, then b = ...

19) 2.4 dm = ... cm.

20) In the opposite Venn diagram, X ∩ Y = ...



Third Find the result of the following:

21) 65.384 – ..... = 65.

22) $\frac{3}{25}$ ÷ ..... = $\frac{25}{3}$

23) Draw the triangle ABC in which AB = 4 , BC = 6 cm and AC = 8 cm, then draw a circle whose center is B and radius length is 4 cm.

The drawing

24) The following table shows the result of the survey of 100 students about their favorite game.

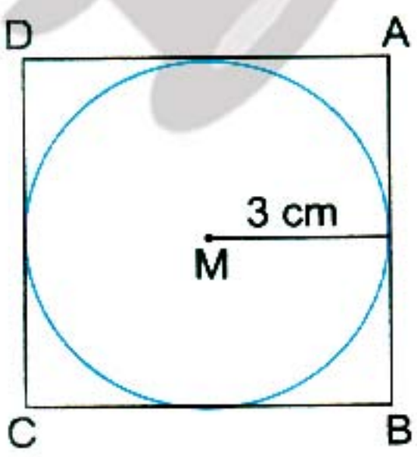
The Game	Football	Handball	Basketball
Number of opinions	50	40	10

If one student is chosen randomly, what is the probability that one of them prefers the basketball game?

25) Arrange in descending order: $5\frac{1}{2}$, $6\frac{1}{4}$, $5\frac{3}{4}$, $5\frac{2}{5}$

26) In the opposite figure:

Calculate the perimeter of the square ABCD if the length of the radius of the circle is 3 cm.



Model 2

First Choose the correct answer in each of the following:

1) 3.26 kilometers ..... meters. (3.36 **or** 33.6 **or** 336 **or** 3260)

2) $9\frac{3}{25} \simeq$ ..... . (to the nearest tenth) (0.9 **or** 9.2 **or** 9.1 **or** 9)

3) $\frac{5}{6} \div 1\frac{1}{6}$ = ... ($\frac{5}{7}$ **or** $\frac{2}{6}$ **or** $\frac{3}{7}$ **or** $\frac{7}{6}$)

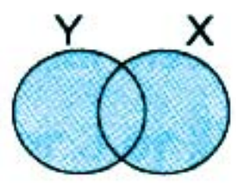
4) 0.321×100 ▭ $312 \div 10$ (< **or** > **or** = **or** ≤)

5) The smallest number in the following is ..... . (0.111 **or** 0.12 **or** 0.123 **or** 1.023)

6) 4.72×10 ▭ 0.472×100 (< **or** > **or** = **or** otherwise)

7) $\frac{3}{5} \times 1.6 > 1.6 \times$ ..... (0.6 **or** 6.6 **or** $\frac{5}{3}$ **or** 0.3)

8) The shaded part in the opposite Venn diagram is expressed by ..... .

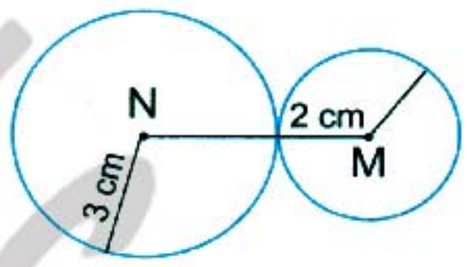


($X \cap Y$ **or** $X \cup Y$ **or** $X - Y$ **or** $Y - X$)

9) If $Y = \{2, 3, 5\} \cap \{1, 3, 5\}$, then $\{1, 2, 3, 5\}$ ..... Y (∈ **or** ⊂ **or** ∉ **or** ⊄)

10) In the opposite figure M and N are two circles,

then MN = ... cm. (5 **or** 6 **or** 3 **or** 2)



11) The diameter length of the circle ▭ the length of a chord in the circle which doesn't pass through its center. (< **or** > **or** = **or** otherwise)

12) The number of altitudes for each triangle = ... (1 **or** 2 **or** 3 **or** 4)

13) A class has 40 pupils. 25 of them are boys and the remainder are girls, if a pupil is chosen randomly, then the probability that the chosen pupil is a girl =..... .

($\frac{3}{8}$ **or** $\frac{5}{8}$ **or** $\frac{3}{5}$ **or** 1)

14) When tossing a coin once, then the probability of the appearance of a tail = ...

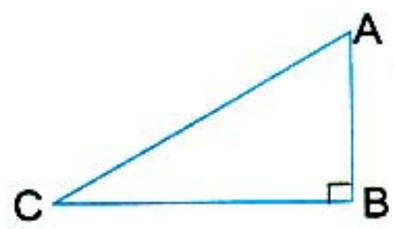
(zero **or** 1 **or** $\frac{1}{2}$ **or** 2)

Second Complete each of the following:

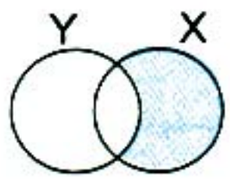
15) If the probability of a student's success in a test is $\frac{8}{10}$, then the probability of his failure is ..... .

16) If X and Y are two sets, $X \subset Y$, then $X \cap Y$ = ...

17) In the opposite figure: The altitude corresponding the base $\overline{BC}$ is ..... .



18) The shaded part in the opposite figure is ..... .



19) The diameter length of the circle whose radius length is 1 cm = ...

20) 4.6798 ≃ ..... "to the nearest thousandth".

Third Answer the following:

21) $2\frac{1}{4} \times \frac{\cdots\cdots}{\cdots\cdots} = 1$

22) 3978 + ... = 3.978

23) If the universal set U = {x : x is an odd number $1 \leq x \leq 15$}, X = { 1 , 3} , Y= { 1 , 5, 9, 13}, draw a Venn diagram which expresses the sets U , X, Y, then find $X \cap Y$

.....

.....

.....

24) Draw a circle M. Its radius length is 2.5 cm, then draw the diameter $\overline{AB}$ and the chord $\overline{AC}$ whose length is 2 cm. Join $\overline{BC}$, then measure its length.

.....

.....

.....

25) A bag contains 5 white balls, 9 red balls and 6 black balls if one ball is chosen randomly, what is the probability that the chosen ball is white?

26) A rectangle whose length is 4.1 cm and width is 3.5 cm, calculate its area.

Model 3

(Model test for the special needs)

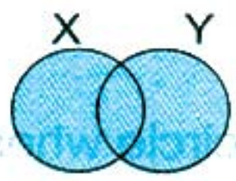
First Choose the correct answer:

1) $\frac{1}{3} \times \frac{3}{4}$ = ... ($\frac{1}{3}$ or $\frac{1}{2}$ or $\frac{1}{4}$)

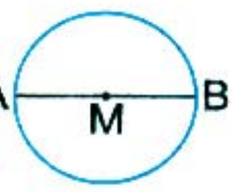
2) If $3 \in \{x, 5\}$, then x = ... (5 or 3 or 8)

3) $312 \div 10$ = ... (3.12 or 0.312 or 31.2)

4) The shaded part represents ..... .



(X ∪ Y or X ∩ Y or X – Y)

5) 

, $\overline{AB}$ is called ..... . (diameter or radius or chord)

6) 14.4×10 ..... 144 (≥ or < or =)

7) In any triangle there are ..... heights. (1 or 2 or 3)

8) {5} ..... {5, 8} (⊂ or ∈ or ∉)

9) When tossing a coin once the probability of the appearance of a tail is ..... .(1 or $\frac{1}{2}$ or $\frac{1}{4}$)

10) $\frac{1}{2}$ = ... (5 or 0.5 or 0.05)

Second Use the following answers to complete the following statements:

($\frac{1}{6}$, 12.1 , 2 , 4.9 , {1 , 5})

1) 4.85 ≃ ..... to the nearest tenth.

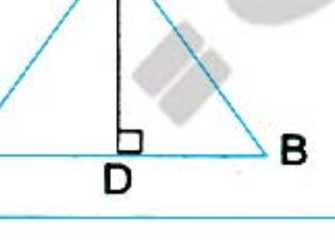
2) When tossing a die once, the probability of the appearance of the number 3 = ...

3) $48.4 \div 4$ = ...

4) A circle of diameter 4 cm, its radius length = ... cm.

5) If X = {1, 2, 5, 7}, Y = {1, 5, 3}, then X ∩ Y = ...

Third *Match:*

A	B
1) The shaded part is ..... 	>
2) $\frac{1}{2}$ ..... $\frac{1}{3}$	$\frac{1}{2}$
3) $4\frac{25}{100} \simeq$ ..... to the nearest tenth	X ∩ Y
4) The probability that Samir win a match is $\frac{1}{2}$, then the probability of losing the match = ...	height
5) In triangle ABC: $\overline{AD}$ is called	4.3

Examinations from Different Governorates 2018

1 Cairo Governorate – Mokattam Educational Directorate

1 Choose the correct answer:

1) 4.257 × 1000 = ... (425.7 or 42.57 or 42570 or 4257)

2) The number of altitudes of any triangle is ..... . (3 or 4 or 1 or 0)

3) The greatest decimal fraction formed from the digits 7, 5 , 9 , 1 , 6 is ..... .
(0.15679 or 0.69571 or 0.97651 or 0.91567)

4) The set of odd numbers is ..... set. (a finite or an infinite or an empty)

5) The altitudes of the obtuse-angled triangle intersect at one point located .....
the triangle. (on or inside or outside)

6) 5.4 ÷ 10 = ... (54 or 540 or 0.54 or 0.054)

7) ∅ ..... {6, 7, 11} (∈ or ∉ or ⊂ or ⊄)

8) 79.238 ≃ ..... (to the nearest $\frac{1}{100}$). (100 or 79.3 or 79.24 or 79.248)

9) When tossing a metallic coin once, then the probability of appearing
of a head = ... ($\frac{1}{2}$ or 1 or 0 or ∅)

10) The reciprocal of $1\frac{2}{7}$ is ..... . ($\frac{9}{7}$ or $\frac{7}{2}$ or $\frac{7}{9}$ or 1)

11) The set of digits of the number 18 ..... {18 , 88}. (∈ or ∉ or ⊂ or ⊄)

12) $\frac{2}{3}$ ..... $\frac{4}{5}$. (< or > or = or ≤)

13) {5 , 6} – {4 , 5 , 6} = ... ({5 , 6} or {4} or {4 , 5 , 6} or ∅)

14) 30 months ≃ ..... years. (360 Or 2.5 or 3 or 4.2)

2 Complete the following:

15) 5.7 × 1.2 = ...

16) If {3, 6} = {3 , x + 1}, then x = ...

17) 17.947 ≃ 17.9 is approximated to the nearest ..... .

18) The probability of the certain event = ...

19) The longest chord in the circle is called ..... .

20) Draw the Venn diagram of the following sets:

A = {1 , 3 , 2 , 6} , B = {1 , 4 , 6 , 3} , then find A∩ B = ...

.....

.....

.....

21) 725.3 + ... =7.253

22) The triangle in which there are two equal sides is called ..... .

3 *Answer the following:*

23) If U = {2 , 3 , 4 , 5 , 6 , 7 , 9}, X = {2 , 3 , 5} and Y = {5 , 7 , 9}, then find:

a) X ∪ Y = {.....}

b) X` = {.....}

24) If the length of a rectangle is 4.6 cm and its width is 3.2 cm. Calculate the perimeter of the rectangle.

25) A box contains 6 white balls, 3 blue balls and 2 red balls. A ball is chosen randomly, **find the probability of getting**:

a) a blue ball =..... .

b) a white or red ball =..... .

c) a green ball =..... .

26) Draw the triangle ABC in which AB = 6 cm, BC = 5 cm, AC = 4 cm, then **find the perimeter of the triangle**.

The drawing

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2 Cairo Governorate – Hadayek Elkoba Educational Directorate

1 Complete:

1) The number 5.669 ≃ 5.7 is approximated to the nearest .....

2) $5\frac{1}{2} \div 3\frac{2}{3}$ = ...

3) If X ⊂ Y, then X ∩ Y = ...

4) If {4 , 8} = {1 + y , 4} , then y = ...

5) 36 days ≃ ..... weeks

6) The longest chord in the circle called .....

7) 20.6354 × 100 = ... ≃ ..... (to the nearest tenth)

8) If $\frac{x}{8} = \frac{15}{24}$, then x = ...

2 Choose the correct answer:

1) {5} ..... {55 , 15} (∈ or ∉ or ⊂ or ⊄)

2) 8.3 tons = ... kg (8300 or 830 or 0.83 or 0.083)

3) 2.25 ÷ 1.5 = ... (1.5 or 15 or 0.15 or 500)

4) The decimal form of the fraction $\frac{3}{20}$ is ..... . (3.2 or $\frac{1}{7}$ or 0.3 or 0.15)

5) 3 ..... the set of the odd numbers. (∈ or ∉ or ⊂ or ⊄)

6) Any triangle has ..... altitudes (1 or 2 or 3 or 4)

7) A circle with a diameter length 8 cm. then the length of its radius = ... cm.
(4 or 5 or 6 or 16)

8) ∅ .....{8 , 7} (∈ or ∉ or ⊂ or ⊄)

9) The altitudes of the obtuse-angled triangle is located ..... the triangle.
(outside or inside or on or center)

10) Tossing a regular coin, the probability of landing on a head = ... ($\frac{1}{3}$ or $\frac{1}{2}$ or $\frac{3}{4}$ or 1)

11) {8} – {2 , 5 , 8} = ... (∅ or {8} or {2 , 5} or {2 , 5 , 8})

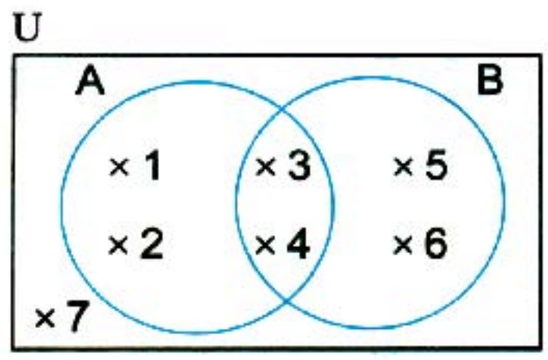
12) 572.4 cm ≃ ..... m (6 or 50 or 60 or 572)

13) The set of odd numbers is a/an ..... set (finite or null or infinite or {1 , 3 , 5})

14) If 6 ∈ {3 , 5 , 2x} , then x = ... (6 or 1 or 2 or 3)

3 Answer the following:

1) From the opposite Venn diagram, find:



a) A ∪ B = ...

b) A ∩ B = ...

c) A – B = ...

d) A` = ...

2) A bag contains 2 red balls, 3 black balls and 4 white balls. All the balls are identical and equal in volume. A ball is drawn randomly, calculate the probability that:

a) The drawn ball is red ..... .

b) The drawn ball is white or black ..... .

3) Draw Δ XYZ which is equilateral and its side length = 4 cm, then draw a circle of center X and radius length 4 cm.

The drawing

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4) Then, from the drawing, complete:

a) $\overline{XY}$ is called ..... in the circle X.

b) $\overline{XZ}$ is called ..... in the circle X.

c) $\overline{YZ}$ is called ..... in the circle X.

d) The perimeter of Δ XYZ = ... cm.

3 Cairo Governorate – Rod El-Farag Educational Directorate

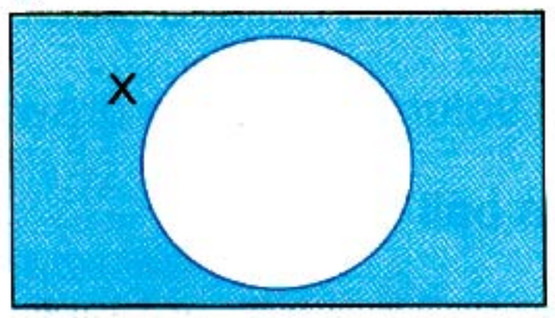
1 Choose the correct answer:

1) {3 , 4} ..... {3 , 5 , 6} (∈ or ∉ or ⊂ or ⊄)

2) 48 days ≃ ..... weeks (7 or 6 or 8 or 5)

3) 7.8246 ≃ 7.825 to the nearest ..... (units or thousandth or tenth or hundredth)

4) The shaded part represents .....



(X or U or X` or ∅)

5) All the diameters of the same circle are ..... in length.

(equal or different or parallel or perpendicular)

6) If X ⊂ Y , then X ∪ Y = ... (X or Y or X – Y or ∅)

7) 4.7 m = ... cm (47 or 0.47 or 470 or 407)

8) $\frac{1}{4} \times 20$ = ... (3 or 5 or 4 or 6)

9) 1 ..... {11} (∈ or ∉ or ⊂ or ⊄)

10) Any triangle has ..... altitudes. (3 or 4 or 1 or 2)

11) 295 ÷ ..... = 0.295 (10 or 100 or 1000 or 1)

12) For any set X , X ∩ X` = ..... (X` or U or X or ∅)

13) 9.18 ÷ 0.54 = ... ÷ 54 (91.8 or 0.918 or 918 or 9.18)

14) $\frac{2}{7}$ ▭ $\frac{3}{6}$ (> or = or < or ≥)

2 Complete:

1) The probability of the certain event is .....

2) 32.614 ≃ ..... (to the nearest hundredth)

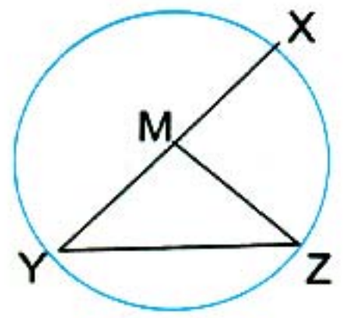
3) {7 , 5} ∩ ∅ = ...

4) $2\frac{3}{4}$ = ... ≃ ..... (to the nearest tenth)

5) 5 ∈ {1 , x} , then x = ...

6) $\frac{8}{5} \div \frac{4}{5}$ = ...

7) In the opposite figure:



If the radius MY = 3 cm

and YZ = 4 cm, then

a) $\overline{YZ}$ is called .....

b) The perimeter of the triangle MYZ = ... cm

3 Answer the following:

1) Find the result:

a) 6.5 × 0.43 = ...

b) 6.534 + 0.121 = ...

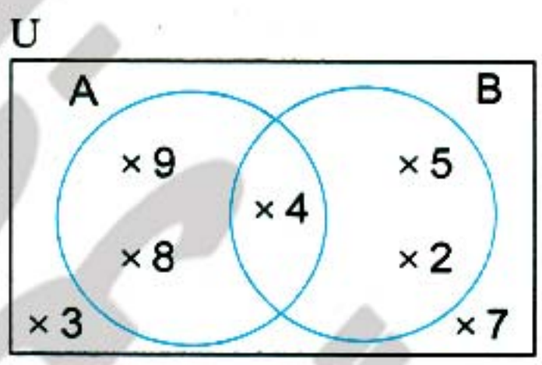
2) Draw the triangle ABC in which AB = AC = 5 cm, BC = 7 cm, then draw the altitude $\overline{AD}$ on $\overline{BC}$

.....

.....

.....

3) In the opposite Venn diagram, find:



1) A ∩ B = ...

2) A ∪ B = ...

3) A – B = ...

4) A` = ...

4) As tossing a die once the probability of getting:

a) an even number = ...

b) a number less than 1 = ...

4 Cairo Governorate – Mathematics Supervision for Governmental and Distinguished Governmental Language. School

1 Choose the correct answer:

1) 63.594 ≃ 63.6 to the nearest ..... (0.001 or 0.01 or 0.1 or 10)

2) $\frac{3}{4}$ < ..... ($\frac{1}{3}$ or $\frac{1}{2}$ or $\frac{2}{3}$ or 1)

3) The chord which passes through the center of a circle is called ..... (diameter or radius or center or side)

4) 537.1 ÷ 10 = ... (5.371 or 53.71 or 537.1 or 5371)

5) {2} ..... {1 , 2 , 3} (∈ or ∉ or ⊂ or ⊄)

6) 55.241 × 100 = ... (0.55241 or 5.5241 or 5524.1 or 55241)

7) 3.125 kilogram = ... grams (3125 or 312.5 or 31.25 or 0.3125)

2 Choose the correct answer:

8) If X = {1 , 2 , 3} ∩ {2 , 4 , 6}, then 3 ..... X. (∈ or ∉ or ⊂ or ⊄)

9) The probability of the impossible event = ... (∅ or 0 or 0.5 or 1)

10) $4\frac{1}{2} \times 2\frac{2}{3}$ = ... (12 or $8\frac{1}{3}$ or $5\frac{2}{5}$ or $\frac{17}{6}$)

11) $\frac{5}{7} + \frac{5}{9}$ = ... ($\frac{7}{9}$ or $\frac{9}{7}$ or $\frac{25}{63}$ or 1)

12) Every triangle has ..... altitude(s). (1 or 2 or 3 or 4)

13) $3\frac{1}{8}$ ≃ ..... (to the nearest hundredth) (3 or 3.10 or 3.12 or 3.13)

14) 355 ÷ 18 = 3.55 + ... (0.18 or 1.8 or 18 or 180)

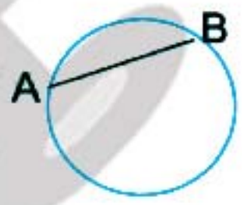
3 Complete each of the following:

15) 8657 cm ≃ ..... meters.

16) $\frac{3}{4} \times 8\frac{2}{3}$ = ... (in decimal)

17) If X = {2 , 5 , 7}, Y= {2 , 3 , 5}, then X ∪ Y= .....

18) In the opposite figure: $\overline{AB}$ is called ..... in the circle



19) 6.25 + 2.5 = ...

20) The midpoint of any diameter in the circle is called ..... of the circle.

21) As tossing a fair die once, the probability of getting an even number = ...

22) 2.253 + 12.652 = ...

4 **23)** A card has been randomly drawn out of 10 cards numbered from 1 to 10, find the probability of getting:

a) A prime number

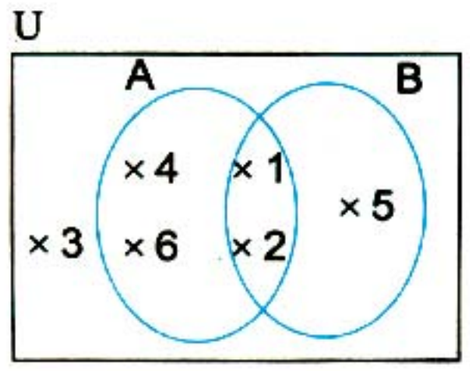
b) An even number greater than 6

24) A man bought a TV for L.E 2000. He paid L.E 440 of its cost and paid the remainder on monthly installments , each of them equals L.E 32.5. Find the number of installments.

25) From the opposite Venn diagram, find:

a) A ∪ B .....

b) A – B .....



26) Draw the triangle ABC in which BC = 6 cm and AC = AB = 5 cm and draw $\overline{AD}$ perpendicular to $\overline{BC}$, then find the length of $\overline{AD}$

The drawing

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5 Giza Governorate – El-Haram Directorate – Fadl Lang. Schools

1 Choose the correct answer:

1) {3 , 4} ..... {34} (∈ or ∉ or ⊂ or ⊄)

2) If : {6 , 7} = {6 , x + 1}, then x = ... (7 or 6 or 5 or 4)

3) 27.64 × ..... = 276.4 (10 or 100 or 1000 or 10000)

4) The number of altitudes of any triangle = ... (0 or 1 or 2 or 3)

5) 63.534 ≃ ..... (to the nearest $\frac{1}{10}$) (64 or 63.6 or 63.5 or 63.53)

6) $1\frac{1}{4} + \frac{1}{4}$ = ... ($\frac{1}{4}$ or 4 or 5 or $\frac{1}{5}$)

7) 2.25 ÷ 1.5 = ... (15 or 1.5 or 0.15 or 0.015)

8) $2\frac{1}{3}$ ▭ $\frac{9}{4}$ ..... (< or > or = or ≤)

9) Zero ..... ∅ (∈ or ∉ or ⊂ or ⊄)

10) If the length of the diameter of a circle is 10 cm, then its radius length = ... cm.
(20 or 10 or 5 or 2.5)

11) 63.5 m = ... cm (635 or 6350 or 63500 or 635000)

12) { 1 , 2 , 3 , ...} is ..... set (a finite or an empty or an infinite or an odd number)

13) 2.7 × 0.5 = ... (135 or 13.5 or 1.35 or 0.135)

14) The number of subsets of the set {a , b} equals ..... (1 or 2 or 3 or 4)

2 Complete:

15) If X ⊂ Y, then, X ∩ Y = ...

16) If: 8 ∈ { 3 , 7 , x}, then x = ...

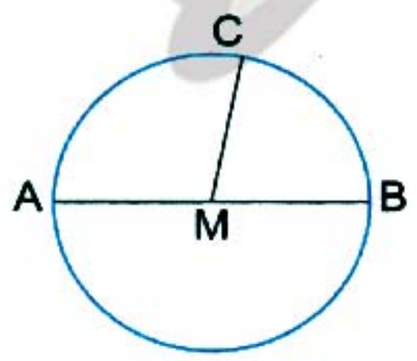
17) 815.4 ÷ 100 = ...

18) The longest chord in a circle is called .....

19) The probability of the certain event = ...

20) **in the opposite figure:**

$\overline{MC}$ is called a ..... in the circle M

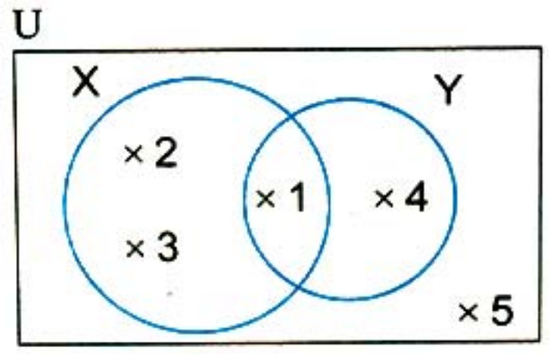


21) 3.453 + 4.342 = ... ≃ ..... (to the nearest $\frac{1}{100}$)

22) $\frac{3}{4}$ ≃ 0.8 (to the nearest .....)

3 Answer the following questions:

23) By using the opposite figure:



Complete:

1) $X \cap Y$ = ...

2) $X - Y$ = ...

3) $X \cup Y$ = ...

4) Y' = ...

24) Rearrange the following in descending order:

$\frac{1}{2}$, 0.8 , $\frac{1}{4}$, 0.3

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25) Draw Δ ABC where BC = 6 cm and AB = AC = 5 cm. then draw $\overline{AD}$ perpendicular from A to $\overline{BC}$.

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26) A bag contains 5 white balls, 6 black balls and 2 red balls. All balls are equal in size, a ball is drawn randomly. Calculate the probability that the drawn ball is:

1) black .....

2) green .....

6 Giza Governorate – Maths Inspectorate

1 Choose the correct answer:

1) $3 \in \{x , 5\}$, then x = ... (1 or 2 or 3 or 4)

2) $\frac{3}{4}$ ..... $\frac{1}{2}$ (< or > or =)

3) The radius length of a circle is 5 cm, then length of its diameter is ..... cm.
(5 or 10 or 2.5 or 7)

4) 0.07 × 0.9 = ... (0.00063 or 0.0063 or 0.063)

5) 3.75 × 100 = ... (37.5 or 375 or 3750 or 37500)

6) $\frac{5}{6} + 1\frac{1}{6}$ = ... ($\frac{5}{7}$ or $\frac{2}{6}$ or $\frac{3}{7}$ or $\frac{7}{6}$)

7) 3.2 Km = ... m (32 or 320 or 3200 or 32000)

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2 Choose the correct answer:

1) $\{1 , 2 , 3\} \cap \{ 2 , 5\}$ = ... ({1} or {2} or {3} or {5})

2) 4.72 × 10 ..... 0.472 × 100 (< or > or =)

3) The probability of appearance of an even number when tossing a die once = ...
(1 or $\frac{3}{6}$ or $\frac{2}{6}$ or 0)

4) 43 days ≃ ..... weeks (6 or 7 or 8 or 9)

5) If $\frac{x}{8} = \frac{15}{24}$, then x = ... (3 or 5 or 8)

6) 5.45 ÷ 0.5 = ... (1.9 or 1.09 or 10.9 or 109)

7) The smallest number from the given ones ..... (0.111 or 0.12 or 0.123 or 1.023)

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3 a) Complete the following:

1) 26.274 + 23.28 = ... ≃ ..... (to the nearest $\frac{1}{100}$)

2) $\{ 2 , 5 , 7\} \cup \{2 , 8 , 5\}$ = ...

3) (3.25 + 9.75) ÷ 13 = ...

4) The number of altitudes of the right-angled triangle is .....

b) Complete by putting the suitable symbol: (∈ or ∉ or ⊂ or ⊄)

5) 5 ..... {15, 55}

6) {3 , 5} ..... {53 , 35}

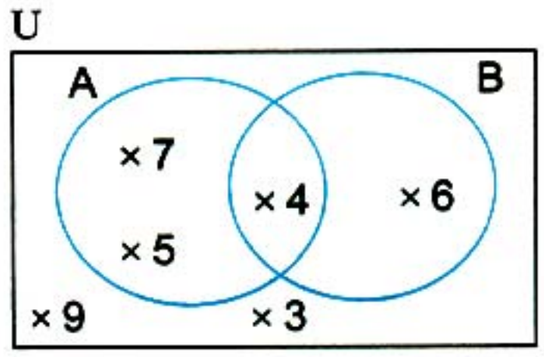
7) 15 ..... {1 , 3 , 5 , 7, ...}

8) {7} ..... {4 , 6 , 7}

4 Answer the following:

1) Find the area of the rectangle whose length is 6.4 cm and width is 2.5 cm

2) From the opposite figure, find by the listing method each of the following:



a) A ∪ B = ...

b) A ∩ B = ...

c) B – A = ...

d) A` = ...

3) A box contains 5 white balls , 9 red balls and 6 black balls. If a ball is drawn randomly, **find the probability that the drawn ball is**:

a) white ball

b) not black one

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4) Draw the triangle ABC in which AB = 4 cm , BC = 6 cm and AC = 8 cm.

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7 Giza Governorate – Maths Inspectorate

1 Choose the correct answer:

1) 7645.3 ÷ 100 = ... (764.53 **or** 76.453 **or** 76453 **or** 7.6453)

2) 3.75 × 1000 = ... (37.50 **or** 375 **or** 3750 **or** 375000)

3) The probability of an impossible event = ... (0 **or** 1 **or** 0.5 **or** ∅)

4) 255 ÷ 25 = 2.55 ÷ ..... . (25 **or** 0.25 **or** 2.5 **or** 2500)

5) 5.4 Tons = ... kg (5400 **or** 540 **or** 0.454 **or** 54000)

6) 8 ..... {7 , 5 , 8} (∈ **or** ∉ **or** ⊂ **or** ⊄)

7) ∅ ..... {1 , 2} (∈ **or** ∉ **or** ⊂ **or** ⊄)

8) {3 , 4} = {1 + y , 4}, then y = ... (7 **or** 4 **or** 2 **or** 5)

9) $3\frac{1}{2} \div \frac{7}{12}$ = ... (6 **or** $\frac{8}{12}$ **or** $\frac{50}{12}$ **or** 4)

10) 46.432 ≃ 46.43 approximated to the nearest ..... (ten **or** 0.1 **or** 0.01 **or** 0.001)

11) If X ⊂ Y, then X ∩ Y = ... (∪ **or** X **or** Y **or** ∅)

12) If $\frac{2}{5} = \frac{a}{15}$, then a = ... (3 **or** 5 **or** 6 **or** 7)

2 Complete each of the following:

13) 3.278 ÷ 2.2 = ... ≃ ..... (to the nearest tenth)

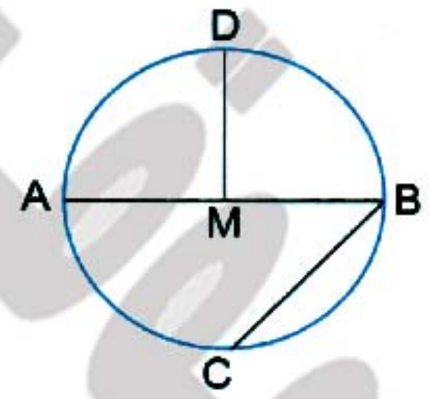
14) {5 , 6} ∩ {4 , 5} = ...

15) **From the opposite figure:**

a) $\overline{BC}$ is called ..... in the circle M

b) ..... is a diameter

c) MD = ... = ...



3 Answer the following:

16) 11655 ÷ 555 = ...

17) 67.5 – 24.38 = ... ≃ ..... (to the nearest unit)

18) {3 , 4 , 7} ∪ {2 , 4 , 7} = ...

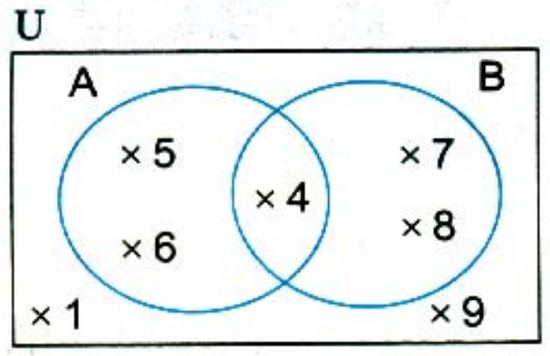
19) $\frac{3}{4} \times \frac{10}{6}$ = ...

20) {4 , 5 , 2} – {2 , 7 , 1} = ...

21) 0.532 × 3.2 = ...

22) The probability of the sure event = ...

23) Using the Venn diagram, list each of the following:



a) A ∩ B = ...

b) A ∪ B = ...

c) A – B = ...

d) B` = ...

24) If the price of a piece of sweet is L.E. 3.75, what is the price of 25 pieces of the same kind?

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25) A box contains 4 blue balls, 3 red balls and 7 yellow balls, a ball is drawn randomly from the box, find the probability of drawing

a) blue ball

b) not red ball

c) yellow ball

.....

.....

.....

26) Draw Δ ABC where AB = AC = 5 cm and BC = 4 cm, then draw $\overline{AD}$ perpendicular from A to $\overleftrightarrow{BC}$

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8 Giza Governorate – Modern Narmer Language Shcool

1 Choose the correct answer:

1) {6} ..... {2 , 4 , 6} (∈ or ∉ or ⊂ or ⊄)

2) The chord which passes through the center of the circle is called .....
(diameter or radius or center or side)

3) The number 875.356 to the nearest hundredth is .....
(875 or 875.4 or 875.35 or 875.36)

4) 10 × 47.6 ..... 4.76 × 100 (< or > or = or ≤)

5) The number of altitudes in a right angled-triangle is ..... (0 or 1 or 2 or 3)

6) 189.32 ÷ 100 = ... (18932 or 18.932 or 1.8932 or 1893200)

7) $\frac{1}{3} \times \frac{3}{4}$ = ... ($\frac{1}{3}$ or $\frac{1}{2}$ or $\frac{1}{4}$ or 1)

8) The number of subsets of {4 , 5 , 6} is ..... (1 or 2 or 8)

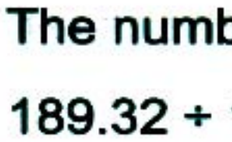
9) If 6 ∈ {2x, 5}, then x = ... (4 or 2 or 3)

10) In any triangle, there are ..... heights (1 or 2 or 3)

11) 37 days ≃ ..... weeks (4 or 5 or 6 or 7)

12) As throwing a fair die once, the probability of getting the number 4 equals .....
($\frac{1}{4}$ or $\frac{1}{6}$ or $\frac{1}{3}$)

13) If the radius length in a circle is 4 cm, then the diameter is = ... cm (44 or 8 or 2)

14) 

The shaded part represents ..... (X ∪ Y or X ∩ Y or X – Y)

15) $\frac{5}{8}$ is ..... 0.564 (more than or less than or equal to)

16) {75} ..... {7 , 5} (∈ or ∉ or ⊂ or ⊄)

17) 9.64 + 4 = ... (241 or 2.96 or 30.56 or 2.41)

18) The probability of a sure event is = ... (0 or 1 or 2)

2 Complete:

1) The longest chord in a circle is called ..... .

2) {1 , 2 , 3 , 4} ∩ the set of prime number = ...

3) $2\frac{1}{3} + \frac{5}{6}$ .....

4) { 2 , 6 , 8} – { 6 , 7 , 8} = ...

5) The triangle in which the measures of angles are 30° , 60° , 90° is called ..... triangle.

6) 48.8 dm ..... cm.

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3 **If U = { 1 , 2 , 3 , 4 , 5 ,6 , 7} , X = { 1 , 3 , 4}, and Y = { 4 , 6 , 7}**

Represent these sets using **Venn diagram**, and then complete the following:

1) $X \cap Y$ = {.....}

2) $X \cup Y$ = {.....}

3) $X`$ = {.....}

4) $Y`$ = {.....}

5) $(X \cup Y)`$ = {.....}

6) $(Y - X)`$ = {.....}

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4 **1)** Draw Δ ABC in which AB = 8 cm, BC = 6 cm, AC = 6 cm, then name the type of the triangle according to its sides.

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2) A bus covers 32.5 km in one hour, how many kilometers dose it cover in 0.5 of an hour?

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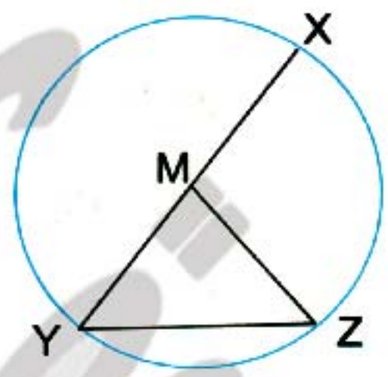
3) Complete the following using the opposite diagram:



a) MX = ... = ...

b) $\overline{YZ}$ is called .....

c) The longest chord is .....

9 Alexandria Governorate – El-Montazah Zone – Brilliance Language School

1 Choose the correct answer:

1) If $7 \in \{5 , 6 , x + 1\}$, then x = ... (4 or 6 or 5 or 8)

2) The length of the diameter of a circle whose radius length is 5 cm. equals ..... .

(10 cm or 2.5 cm or 10 m or 5 cm)

3) 65.988 × ..... = 6598.8 (10 or 1000 or 100 or 0)

4) Probability of getting number 7 on a die is ..... .

(certain or zero or impossible or $\frac{1}{2}$)

5) $23\frac{3}{8}$ = ... (as a decimal) (23.8 or 23.3 or 23.375 or 23.357)

6) $\frac{1}{7}$ x 49 = ... (7 or 49 or 77 or $\frac{1}{7}$)

7) 2.546 km = ... dm. (2546 or 25.46 or 25460 or 254.6)

8) $2\frac{3}{7}$ ..... $2\frac{4}{5}$. (> or < or + or =)

9) If $7 \in \{7 , 5\} \cap \{3 , 4 , x\}$, then x = ... (7 or 4 or 3 or 5)

10) 647.5 ÷ ..... = 0.6475. (10 or 100 or 0.1 or 100)

11) 

The shaded part represents ..... . (A ∪ B or A = B or A – B or A ∩ B)

12) Diameter is a ..... that passes through the center of the circle.

(side or radius or chord or line segment)

13) The type of the triangle whose angles are 100° , 50° and 30° is .....-angled triangle. (acute or isosceles or right or obtuse)

14) X – X = ... (∈ Or ∅ or X or Y)

2 Complete the following:

15) $A \cap A` =$ ....., $A \cup A` =$ ..... .

16) The right-angled triangle has ..... altitudes

17) The sum of the interior angles of the triangle = ... °.

18) The probability of the impossible event = ... , probability of certain event = ...

19) The measure of the two acute angles in the right-angled triangle = ... °.

20) $\varnothing \cap \{0\}$ = ...

21) 984.374 ≃ ..... (approximated to the nearest $\frac{1}{10}$)

22) The perimeter of the equilateral triangle whose side length is 7 cm = ... cm.

3 Find the result of:

23) a) 63.7 × 1.5 = ...

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b) 35.84 + 1.12 = ...

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24) A box contains some cards numbered from 1 to 9 , if a card is drawn randomly,

find the probability of getting:

a) a card that carries an even number = ...

b) a card that carries a prime number = ...

c) a card carries a number divisible by 3 = ...

25) Find the result of:

a) A = ...

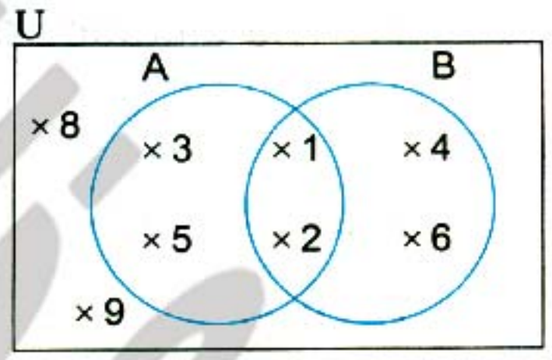
b) B = ...

c) A – B = ...

d) A ∩ B = ...

e) A ∪ B = ...

f) A` = ...



26) Draw circle M with diameter AB = 8 cm and draw its chord $\overline{AC}$ with length 3 cm, then draw $\overline{BC}$ and find its length.

The drawing

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10 Alexandria Governorate – Mid-Zone Administration

1 Choose the correct answer:

1) If $2 \in \{0 , 1 + x\}$, then x = ... (1 or 2 or 0 or 3)

2) The length of the radius = ... × the length of the diameter. (2 or $\frac{1}{2}$ or 4 or $\frac{1}{4}$)

3) $\frac{1}{4}$ × ..... = $\frac{1}{8}$ (2 or $\frac{1}{2}$ or 4 or $\frac{1}{4}$)

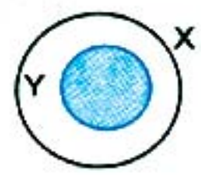
4) 1.7538 × 100 = ... (175.38 or 17.538 or 1753.8 or 17538)

5) The decimal form of this fraction $\frac{2}{25}$ is ..... . (0.08 or 0.008 or 0.8 or 8)

6) In any triangle there are at least ..... acute angles. (1 or 2 or 3 or 4)

7) If $\frac{3}{5} = \frac{M}{15}$, so M = ... (3 or 15 or 9 or 18)

8) The suitable symbol which expresses the shaded part in the opposite figure is ..... .



((X ∩ Y) or (X ∪ Y) or (X ⊂ Y) or (Y ⊂ X))

9) 43 days ≃ ..... weeks. (4 or 6 or 7 or 8)

10) 5.45 + 0.5 = ... (1.9 or 1.09 or 10.9 or 19)

11) The altitudes of the acute-angled triangle intersect at one point ..... the triangle.
(on or outside or inside or parallel)

12) $X \cap X` =$ ..... . (X or X` or ∅ or U)

13) $9\frac{3}{25}$ = ... (to the nearest tenth) (9.03 or 9.1 or 9.3 or 9)

14) ∅ ..... {4 , 2} (∈ or ∉ or ⊂ or ⊄)

2 Complete the following:

15) The number of subsets for the set {2 , 3} is ..... .

16) ..... ÷ 10 = 3.721 x 10

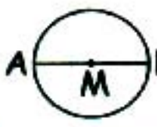
17) The probability of getting number 10 on the face of a die when it is thrown = ...

18) The estimation of the quotient of 4.372 ÷ 2.13 is.....

19) The longest chord in a circle is called ..... .

20) 99.995 ≃ ..... (to the nearest hundredth)

21) $8.25 + 8\frac{1}{4}$ = ...

22) 

$\overline{AM}$ is called ..... .

3 **23)** Complete (0.345 + 7.5) × 4 = ...

24) Find the length of the rectangle whose area is 9.43 cm^2 and its width is 2.45 cm to the nearest tenth.

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25) A bag contains 5 white balls and 9 red balls. If one ball is chosen randomly what is the probability that the chosen ball is white?

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26) Draw the triangle ABC in which AB = 7 cm, BC = CA= 6 cm, then draw the line segment from point C that is perpendicular to $\overline{AB}$ at D and find its length.

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The drawing

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11 Qalubia Governorate – Mathematics Supervision

1 Choose the correct answer:

1) 3 ..... {3 , 13 , 23 , 33}. (∈ or ∉ or ⊂ or ⊄)

2) 3.75 x 1000 = ... (0.375 or 0.0375 or 3750 or 37.5)

3) $\frac{1}{3} \times \frac{3}{4}$ = ... ($\frac{1}{3}$ or $\frac{3}{4}$ or $\frac{1}{2}$ or 0.25)

4) The perimeter of the equilateral triangle whose side length is 3.2 cm = ...
(9 or 9.2 or 9.6 or 9.4)

5) 43 days ≃ ..... . (to the nearest week) (4 or 5or 6 or 7)

6) If $\frac{a}{3} = \frac{5}{15}$, then a = ... (4 or 5 or 1 or 2)

7) 14.4 × 10 ..... 144. (> or < or = or otherwise)

8) ∅ ..... {5 , 6} (⊄ or ⊂ or ∈ or ∉)

9) 31.295 + 21.61 ≃ ..... . (to the nearest $\frac{1}{100}$) (52.905 or 52.90 or 52.91 or 52.92)

10) {1 , 3 , 5} ∩ {2 , 4 , 6} = ... ({1 , 2} or ∅ or {4 , 6} or {2 , 4 , 6})

11) $\frac{7}{9} + 1\frac{1}{9}$ = ... ($\frac{8}{9}$ or $\frac{10}{9}$ or $\frac{7}{10}$ or $\frac{9}{10}$)

12) If 5 ∈ {4 + x , 3} , then x = ... (1 or 2 or 3 or 4)

13) The number of the altitudes in any triangle = ... (1 or 2 or 3 or 4)

14) If the length of the radius of a circle is 3 cm, then the length of its diameter
= ..... cm. (3 or 6 or 9 or 12)

2 Complete the following:

15) The set of the digits of the number 7353 is ..... .

16) 2.64 x 0.2 = ...

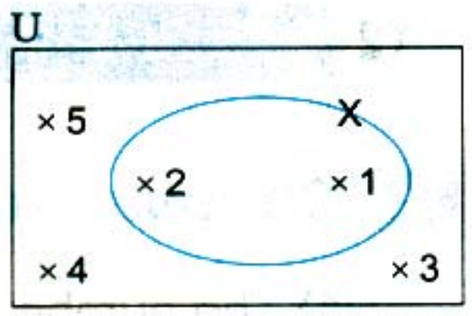
17) At throwing a fair die once. Then the probability of the appearance of
the number 5 is ..... .

18) 3.002 kg = ... gram.

19) $3\frac{1}{8}$ ≃ ..... . (to the nearest $\frac{1}{10}$)

20) $\frac{14}{5} = \frac{.....}{10}$.

21) By using the opposite Venn diagram:



Complete:

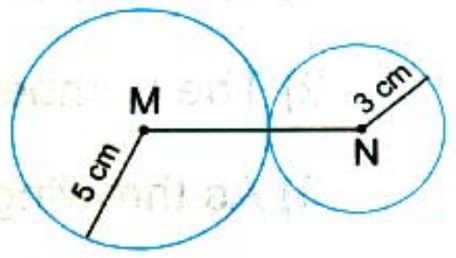
a) U = ...

b) X` = ...

22) In the opposite figure:

M and N are two circles.

Then the length of $\overline{MN}$ = ...cm.



3 Answer the following questions:

23) Write down all the subsets for the set A = {3 , 7}.

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24) If X = {3 , 4 , 5}, Y = {5 , 6}, then X ∪ Y = ...

, X – Y = ...

25) The probability of a pupil's success in an exam equals $\frac{7}{10}$, then the probability of his failure equals .....

26) Draw the triangle ABC in which AB = BC = CA = 5 cm .

12 Menofia Governorate – Maths Department

1 Choose the correct answer:

1) The number of months in half year = ... (6 or 3 or 5 or 9)

2) The number of subsets of the set {4 , 5} equals ..... (2 or 3 or 4 or 9)

3) As throwing a fair die once, then the probability of getting the number 5 equals = ...

($\frac{1}{2}$ or $\frac{1}{6}$ or $\frac{5}{6}$ or $\frac{2}{3}$)

4) If $X \subset Y$, then $X - Y$ = ... (X or Y or ∅ or U)

5) The number 276.5327 to the nearest thousandth =..... .

(277 or 276.533 or 276.54 or 276.5

6) The smallest fraction from the given ones is ..... . ($\frac{1}{3}$ or $\frac{5}{8}$ or $\frac{2}{9}$ or $\frac{2}{5}$)

7) If {7 , 10} ⊂ {10 , x + 4}, then x = ... (3 or 4 or 5 or 6)

8) {9} ..... {99} (∈ or ∉ or ⊂ or ⊄)

9) If X = { 1 , 4 , 5 } ∩ {5 , 3 , 7}, then 1 ..... X (∈ or ∉ or ⊂ or ⊄)

10) If {3 , 6} = {1 + x , 3}, then x = ... (2 or 3 or 4 or 5)

11) To draw a circle of diameter length 12 cm, then the opening distance of compasses should be ..... cm. (12 or 6 or 9 or 24)

12) If M is a circle whose diameter is 8 cm where MA = 7 cm, then the point A is located ..... the circle. (inside or outside or on or otherwise)

13) $\frac{2}{5} = \frac{a}{15}$, then a = ... (6 or 12 or 9 or 4)

14) The quotient of dividing 5.45 ÷ 0.5 = ... (1.9 or 1.09 or 10.9 or 109)

2 Complete each of the following:

15) 99.995 = ... (the nearest hundredth)

16) 5.4 tons = ... kg.

17) $\frac{3}{8} \times \frac{2}{9}$ = ...

18) If X ∩ Y = Y, then ..... ⊂ ..... .

19) The number of the altitudes of the obtuse-angled triangle is .....

20) The chord of the circle which passes through its center is .....

21) 25.25 + 0.25 = ...

22) 3.75 × 1000 = ...

3 Answer the following questions:

23) Arrange the following numbers ascendingly:

$\frac{1}{4}$, 0.8 , 0.4 , $\frac{1}{2}$, $\frac{3}{4}$

.....

.....

24) Represent the two sets A and B by Venn diagram:

A = {1 , 2 , 3 , 6} , B = {2 , 3},

then find A∩B = ... , A∪B = ...

25) Draw Δ XYZ which is equilateral and its side length = 4 cm. Draw a circle of center x and radius length 4 cm.

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26) A bag contains 5 red balls, 8 black balls and 7 white balls, all of them are identical and equal in volume. A ball is drawn randomly, calculate the probability that:

1) The drawn ball is black = ...

2) The drawn ball isn't green = ...

13 Gharbia Governorate – Gharbia Educational Direcorate

1 Choose the correct answer:

1) 10 halves ..... 20 quarters. (< or > or =)

2) 35.7 + 100 = ... (0.357 or 3570 or 357)

3) The longest chord in a circle is called ..... . (radius or diameter or center)

4) (A ∩ B) ..... A. (⊄ or ⊂ or ∈)

5) $2\frac{1}{3} \times$ ..... = 1. ($\frac{3}{7}$ or $\frac{7}{3}$ or $2\frac{1}{2}$)

6) X ∩ X` = ... (∅ or U or X)

7) 6.25 ÷ 2.5 = 62.5 ÷ ..... . (250 or 25 or 0.25)

2 Choose the correct answer:

8) 2.5 x 53.8 ..... 0.25 x 5.38 (< or > or =)

9) 24.637 ≃ ..... (to the nearest hundredths) (24.64 or 24.63 or 24.6)

10) { 5 , 7} – {3 , 5 , 8} ..... . (∅ or {5 ,3 , 8} or {7})

11) If A and B are disjoint sets, then A – B = ... (∅ or A or B)

12) The number of altitudes in any triangle is ..... . (1 or 2 or 3)

13) 538.7 cm ≃ ..... m. (6 or 5.387 or 5)

14) If X ⊂ Y, then X ∪ Y = ... (X or Y or ∅)

3 Complete the following:

15) $3\frac{1}{2} + \frac{7}{12}$ = ...

16) 3.56 km = ... m

17) {2 , 4 , 6} ∩ {2 , 3 , 5 , 7} = ...

18) A circle the length of its radius is 5 cm, then the length of its diameter is ..... cm.

19) The probability of impossible event = ...

20) The altitudes of any triangle intersect at ..... point (s)

21) If a ∈ {1 , 3 , 5} ∩ {2 , 3 ,7}, then a = ...

22) 43.6 ÷ 4 = ...

4 Answer the following questions:

23) If the price of one meter of cloth is L.E. 27.5. What is the price of 3 meters of same kind?

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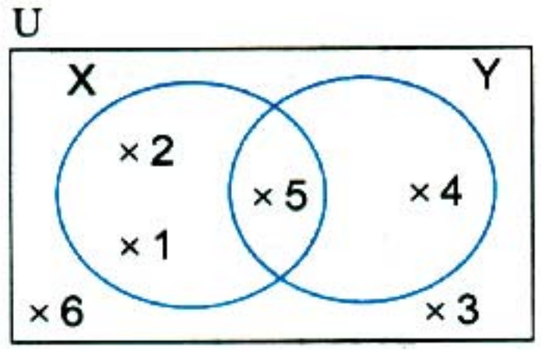
24) From the opposite Venn diagram. Find by listing method:



1) X ∩ Y = {.....}

2) X ∪ Y = {.....}

3) X – Y = {.....}

4) X` = {.....}

25) Draw Δ ABC in which AC = 5 cm, AB = 4 cm, and BC = 3 cm, then draw its altitude from B on $\overline{AC}$.

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26) As throwing a fair die once, find the probability of :

a) Appearing of a prime number.

b) Appearing of a number less than or equal to 6

c) Appearing of an even prime number

d) Appearing of a number that is not divisible by 3

14 Dakahlia Governorate – Maths Supervision

1 Choose the correct answer from between brackets:

1) 235 + 15 = 23.5 + ... (1.5 or 0.15 or 150)

2) $\frac{8}{9} = \frac{a}{18}$, then a = ... (4 or 16 or 27)

3) 50 cm^2 = ... dm^2 (0.05 or 50 or 0.5)

4) {3} ..... {1 , 2 , 3}. ($\in$ or $\subset$ or $\not\subset$)

5) The probability of success of a pupil is $\frac{4}{5}$, then the probability of his failure is ..... .
(1 or 0.2 or 0.1)

6) 39 days $\simeq$ ..... weeks. (5 or 6 or 7)

7) $2\frac{1}{2} + \frac{1}{4}$ = ... (5 or 10 or 4)

2 Complete the following:

8) The probability of the sure event is ..... .

9) X $\subset$ Y , then X $\cap$ Y = ...

10) The number of the altitudes of the right-angled triangle is ..... .

11) The perimeter of a square = $\frac{1}{5}$ meter, then its side length = ... cm

12) 12.5 × ..... = 1.25

13) 15 tenths = ... tens.

3 Choose the correct answer:

14) $\varnothing \cup X$ = ... ($\varnothing$ or X or U)

15) {3, $x - 1$} = {3 , 5}, then x = ... (6 or 4 or 3)

16) $\frac{8}{9} >$ ..... . ($\frac{7}{8}$ or $\frac{9}{10}$ or $\frac{19}{20}$)

17) The line segment in which one endpoint is at the center of the circle and the other end point lies on it is called a ..... . (chord or radius or diameter)

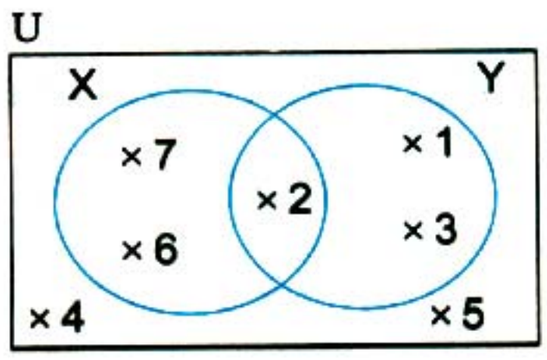
18) {2 , 1 , 17} ..... the set of digits of the number 2117. (= or $\subset$ or $\not\subset$)

19) X $\subset$ Y , then X – Y =..... . (X or Y or $\varnothing$)

20) 25 × 0.1 ..... 25 + 0.1 (= or > or <)

4 Answer the following questions:

21) From the opposite Venn diagram. Find by listing method:



1) X ∪ Y = {.....}

2) X ∩ Y = {.....}

3) X – Y = {.....}

4) (X ∪ Y)` = {.....}

22) A box contains 3 blue balls, 4 red balls and 5 green balls, all balls are identical and equal in size if a ball is drawn randomly, what is the probability that the drawn ball is:

1) blue **2)** not blue

3) blue or red **4)** black

23) **Find (by steps):**

2.8905 + 1.23 = ... (approximated to nearest tenths)

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24) Ahmed bought 35 books, if the price of each book is L.E. 7.5, find the total price of all the books approximated to (the nearest pound). (show steps)

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25) Draw the equilateral triangle ABC whose side length = 6 cm, then:

1) Draw $\overline{AD} \perp \overline{BC}$

2) Calculate the perimeter of Δ ABC.

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15 Kafr El-Sheikh Governorate – Educational Directorate Maths Inspection

1 Complete the following:

1) 1.775 x 0.15 ≃ ..... to the nearest hundredth.

2) The probability of the sure event = ...

3) If $\frac{2}{3} = \frac{16}{a}$, Then a = ...

4) The number of subsets of the set {2 , 6} is ..... .

5) $5\frac{1}{2} + 3\frac{2}{3}$ = ...

6) The longest chord in the circle is called ..... .

7) If {a , 5 , 8} = {b , 4 , 8}, then (a + b) = ...

8) If X = Y, then X – Y= ..... .

2 Choose the correct answer:

9) $4\frac{1}{8} \times 2\frac{2}{3}$ = ... (0 or 10 or 11 or 111)

10) {73} ..... {7 , 3} (∈ or ∉ or ⊂ or ⊄)

11) The number of altitudes of any triangle is ..... . (0 or 1 or 2 or 3)

12) In a class, there are 40 pupils, 25 of them are boys and the rest is girls, the probability of choosing a girl is ..... . ($\frac{3}{8}$ or $\frac{5}{8}$ or $\frac{3}{5}$ or 1)

13) 155.241 × 100 ..... 522.4 x 10 (< or > or = or ≤)

14) A circle of radius length 4 cm, then its diameter = ... cm. (1 or 2 or 4 or 8)

15) If X = {2 , 5 , 6} ∩ {3 , 5}, then X ..... {3 , 5} (∈ or ∉ or ⊂ or ⊄)

16) If {7 , 10} ⊂ {10 , x + 4}, then x = ... (10 or 7 or 5 or 3)

17) 43 days ≃ ..... (to the nearest week) . (5 or 6 or 7 or 8)

18) m ..... {maths}. (∈ or ∉ or ⊂ or ⊄)

19) 4.25 ÷ ..... = $8\frac{1}{2}$ (2 or 12.75 or $\frac{1}{4}$ or 0.5)

20) 2.4 dm = ... cm. (240 or 24 or 0.24 or 0.024)

21) 37440 ÷ 234 = ... (16 or 106 or 160 or 1600)

22) If 6 ∈ {3 , 5 , 2x}, then x = ... (2 or 3 or 4 or 5)

3 Answer the following questions:

23) The area of a rectangle = 10.25 m^2, and its length is 4.1 m, find the width and the perimeter of this rectangle.

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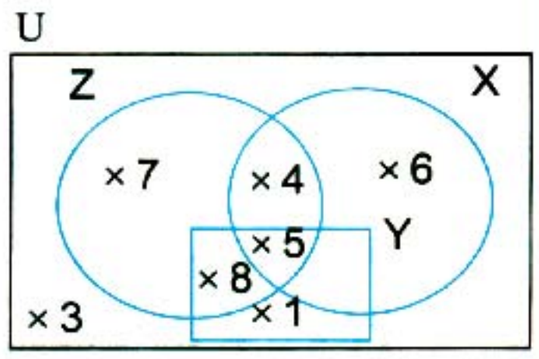
24) Look at the opposite figure, then complete:



1) X ∪ Y = {.....}

2) Z ∩ Y = {.....}

3) X – Z = {.....}

4) $(Z \cup X)'$ = {.....}

25) Arrange the following fractions in ascending order:

0.6 , $\frac{2}{5}$, 0.8 , $\frac{3}{4}$

The order is: ..... , ... , ... , ...

26) Draw Δ ABC in which AB = 3 cm , BC = 4 cm , AC = 5 cm, M is the midpoint of $\overline{AC}$, then draw a circle M with radius length 2.5 cm.

The drawing

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16 Beheira Governorate – Rashid Educational Zone Maths Supervision

1 Choose the correct answer from between the brackets:

1) 13.5 + 10 = ... (135 or 13.5 or 1.35 or 0.135)

2) ∅ ..... {0} (∈ or ∉ or ⊂ or ⊄)

3) The diameter length of the circle whose radius is 4 cm = ... cm (2 or 4 or 6 or 8)

4) 3.27 + 2.4 = ... + 24 (327 or 32.7 or 3.27 or 0.327)

5) If {3 , 4} = {1 + x , 4}, then x = ... (7 Or 4 or 2 or 5)

6) 526.347 ≃ 526.35 is approximated to the nearest ..... . (0.1 Or 0.01 or 0.001 or unit)

7) $3\frac{1}{2}$ + 14 = ... (4 Or $\frac{1}{2}$ or $\frac{1}{4}$ or $\frac{2}{7}$)

8) If $\frac{x}{3} = \frac{14}{21}$, then x = ... (2 or 4 or 7 or 8)

9) If Y ⊂ X then Y ∩ X = ... (X Or Y or ∅ or U)

10) Number of altitudes of any triangle is ..... . (0 Or 1 or 2 or 3)

11) 3 kg = ... tons. (3000 Or 0.3 or 300 or 0.003)

12) 39 days ≃ ..... to the nearest week. (4 Or 5 or 6 or 7)

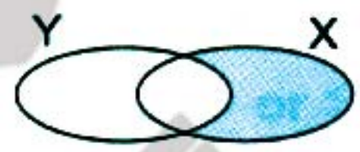
13) 5.35 + 0.5 = ... (1.7 or 1.07 or 10.7 or 107)

14) {2 , 3} – {3 , 5} = ... ({5} or {2} or {3} or ∅)

2 Complete the following:

15) 22902 ÷ 347 = ...

16) The colored section in the opposite figure represents ..... .



17) All radii of the same circle are ..... .

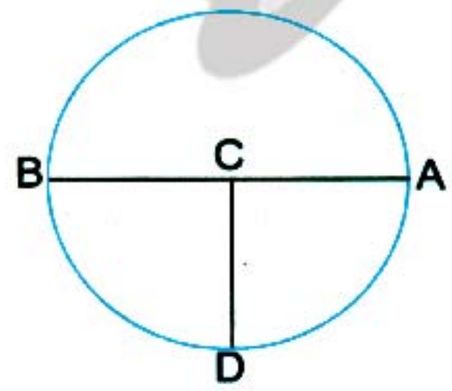
18) 2.4 x 0.07 = ...

19) If the probability that a pupil passes an exam is $\frac{8}{10}$, then the probability that this pupil fails is ..... .

20) $\frac{2}{5} < \frac{2}{x} < 1$ so all possible values of (x) are ..... .

21) {2 , 4 , 7} ∪ {1 , 4 , 7} = ...

22) In the opposite figure $\overline{BC}$ is a ..... in the circle.



3 Find the result:

23) A family consumes 6.5 kg of meat monthly each of L.E. 125.5.

Calculate what the family pays to the nearest pound.

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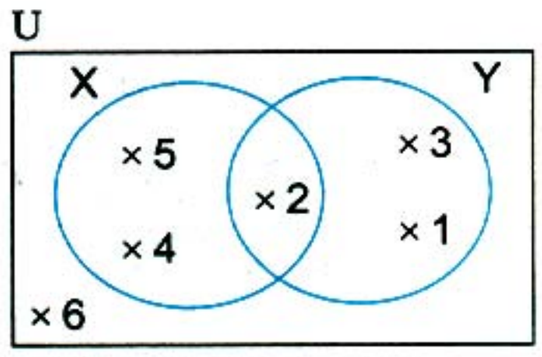
24) By using the opposite Venn diagram, find:

a) X ∪ Y = ...

d) X ∩ Y = ...

b) X – Y = ...

c) X' = ...



25) A box contains 10 cards numbered from 1 to 10, if a card is drawn randomly.

Calculate the probability that the drawn card carries :

a) An odd number .....

b) A number divisible by 3 .....

26) Draw the equilateral triangle ABC whose side length is 6 cm, then draw $\overline{AD} \perp \overline{BC}$.

The drawing

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17 Beheira Governorate – Edko Educational Directorate Maths Supervision

1 Choose the correct answer:

1) {4 , 5} ..... {2 , 3 , 7}. (∈ or ∉ or ⊂ or ⊄)

2) The probability of the impossible event = ... (0 or 1 or 2 or 3)

3) The longest chord in the circle is called ..... .

(radius or chord or diameter or tangent)

4) 2.25 + 1.5 = ... (1.5 or 15 or 0.15 or 500)

5) If {3 , 4} = {x , 4} , then x = ... (3 or 4 or 2 or 5)

6) $3\frac{1}{2} + \frac{7}{12}$ = ... (6 or $\frac{18}{3}$ or $\frac{50}{12}$ or 4)

7) 67.5 – 55.67 = ... (118.3 or 18.13 or 11.83 or 1.183)

8) $\frac{1}{4} \times 4$ = ... (2 or $\frac{1}{4}$ or $\frac{1}{2}$ or 1)

9) If X ⊂ Y, then X ∩ Y = ... (X or Y or ∅ or U)

10) ∅ ..... X. (∈ or ∉ or ⊂ or ⊄)

11) It is ..... that the sun rises from west. (possible or sure or impossible)

12) Any triangle has ..... altitudes. (0 or 1 or 2 or 3)

13) 34 ..... {3 , 4} (∈ or ∉ or ⊂ or ⊄)

14) 43 days ≃ ..... weeks (4 or 6 or 5 or 7)

2 Complete the following:

15) 3.75 × 1000 = ...

16) 426.305 + 67.19 =..... ≃ ..... . (to the nearest $\frac{1}{100}$)

17) 5.4 tons = ... kg

18) {3 , 2 , 5} ∩ {2 , 5} = ...

19) {a , b , c} – {b , c} = ...

20) $6\frac{1}{4} + 12\frac{1}{2}$ = ...

21) 3.7 × 10 + 2.4 × 100 = ...

22) To draw the circle of diameter length 12 cm, then the opening distance of the compasses should be ..... cm.

3 Answer the following questions:

23) A bag contains 5 white balls, 9 red balls and 6 black balls, all the balls are identical and equal in size, if a ball is drawn randomly. What is the probability that the drawn ball is ..... ?

a) white **b)** white or red

24) Draw the triangle ABC in which AB = 3 cm, BC = 4 cm, and AC = 5 cm.

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25) Arrange the following numbers descendingly:

3.4 , 0.0333 , 0.3033 , 3.333 , 0.3303

The order is: ..... , ... , ... , ... , ...

26) If the universal set U = the set of all numbers less than 10, X = {1 , 3 , 2 , 6}, Y = {1 , 5 , 6 , 4} , draw Venn diagram, then find:

1) X ∪ Y.

2) X – Y.

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The drawing

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18 Beheira Governorate – Damanhour Educational Directorate

1 Choose the correct answer:

1) $\frac{1}{2}$ ..... $\frac{1}{3}$ (> or < or = or ≥)

2) $4\frac{1}{8} \times 2\frac{2}{3}$ = ... (1 or 10 or 11 or 111)

3) 3.75×1000 = ... (0.375 or 0.0375 or 3750 or 37.5)

4) $5.45 \div 0.5$ = ... (1.9 or 1.09 or 10.9 or 109)

5) $9\frac{3}{25} \simeq$ ..... (to the nearest tenth). (0.9 or 9.12 or 9.1 or 9)

6) $6250 \div 125$ = ... (50 or 5 or 25 or 250)

7) 38 days ≃ ..... (to the nearest week). (4 or 5 or 6 or 7)

8) If $\{7 , 10\} \subset \{10 , x + 4\}$ the x = ... (3 or 4 or 5 or 6)

9) {52} ..... {5 , 2}. (∈ or ∉ or ⊂ or ⊄)

10) If $Y = \{2 , 3 , 5\} \cap \{1 , 3 , 5\}$, then {2 , 3} ..... Y (∈ or ∉ or ⊂ or ⊄)

11) If $a \in X$, then a ..... X`. (∈ or ∉ or ⊂ or ⊄)

12) The number of subsets of A {2 , 3} = ... (3 or 4 or 5 or 2)

13) The altitudes of the obtuse-angled triangle intersect ..... triangle.
(outside or inside or at vertex or otherwise)

14) The length of the diameter of any circle ..... the length of any chord in it that does not pass through the center. (> or < or = or ≥)

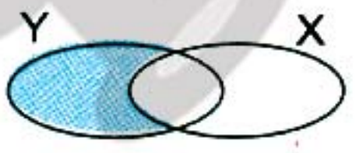
2 Complete the following:

15) $2\frac{1}{2} \div 1\frac{1}{4}$ = ...

16) If $\frac{x}{8} = \frac{15}{24}$, then x ..... .

17) 33.28 + 36.274 = ... ≃ ..... (to the nearest $\frac{1}{100}$)

18) The shaded part represents ..... .



19) If $X \subset Y$, then $X \cap Y$ = ...

20) A circle its radius = 1.5 cm, then its diameter = ... cm

21) ABC is an equilateral triangle of perimeter 15 cm, then its side length = ... cm

22) When tossing a coin once, the probability of appearing of a head = ...

3 Answer the following:

23) A car covers equal distances in equal times. If this car covered 24.72 km in 1 hour, how many kilometers does it cover in $2\frac{1}{2}$ hour?

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24) A box contains 10 cards numbered from 1 to 10, if a card is drawn randomly, calculate the probability that the drawn card carries:

a) An odd number .

b) An even prime number.

c) A number divisible by 3.

d) A number less than 6.

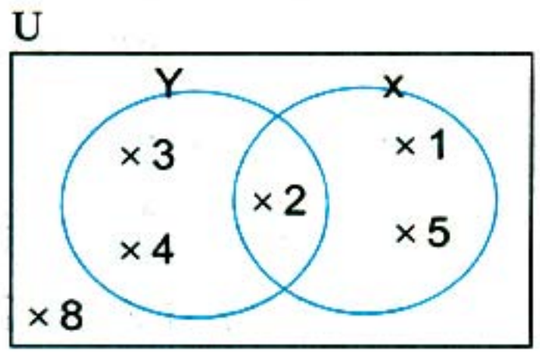
25) By using the opposite Venn diagram, find:

a) X ∪ Y = ...

b) X ∩ Y = ...

c) $(X`)`$ = ...

d) X – Y = ...



26) Draw the triangle ABC where $\overline{AB}$ = 4 cm, BC = 5 cm and CA = 6 cm, then draw its altitude from vertex A to base $\overline{BC}$.

The drawing

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19 Damietta Educational Directorate Maths Supervision D.O.L Schools

1 Choose the correct answer from that between the brackets:

1) 22.4567 ≃ ..... (to the nearest thousandth) (22.456 or 22.457 or 22.45 or 22.46)

2) 43.398 m = ... cm. (0.43398 or 4.3398 or 43.398 or 4339.8)

3) The set of prime numbers less than 20 is ..... set .

(infinite or finite or equal or not equal)

4) $2\frac{3}{4}$ ..... $2\frac{5}{7}$ (< or = or > or ≤)

5) If $\frac{b}{3} = \frac{8}{12}$, then b = ... (2 or 3 or 4 or 5)

6) $2\frac{2}{3} \times 4\frac{1}{8}$ = ... (1 or 10 or 11 or 111)

7) The longest chord in a circle is called ..... . (radius or chord or diameter or otherwise)

8) $\frac{1}{4} \div 0.5$ = ... (0.005 or 0.05 or 0.5 or 5)

9) 87.67 ÷ 1000 = ... (876.7 or 8.767 or 0.8767 or 0.08767)

10) 0.2 x 0.2 x 0.2 = ... (0.008 or 0.08 or 0.2 or 0.8)

11) { 5 } ..... {3 , 4 , 1} (∈ or ∉ or ⊂ or ⊄)

12) If M is a circle whose diameter is 8 cm where MA = 7 cm, then the point A is located ..... the circle. (inside or outside or on or otherwise)

13) The number of subsets for the set {1 , 2 , 3} is ..... . (5 or 6 or 7 or 8)

14) {b , o , x} ..... the set of letters of word "box". (∈ or ∉ or = or ⊂)

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2 Complete the following:

15) The probability of the impossible event = ...

16) $\frac{1}{8} \simeq$ ..... (to the nearest hundredth).

17) The greatest fraction from the following $\frac{1}{2}$, $\frac{1}{4}$, $\frac{3}{8}$ is ..... .

18) The number of altitudes of the right-angled triangle = ...

19) If 5 ∈ {3 , 4 + x} , then x = ...

20) {1 , 2 , 5 } – {5} = ...

21) $3\frac{3}{4} + 1\frac{7}{8}$ = ...

22) To draw a circle of diameter length 10 cm, then the opening distance of the compasses = ...

3 Answer the following questions:

23) An owner of packing food factories wanted to pack 5175 kilograms of sugar equally in 225 packs. What is the weight of each pack?

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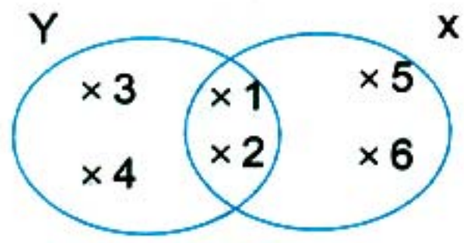
24) Look at the opposite Venn diagram, then find the following:



a) X ∪ Y = ...

b) X ∩ Y = ...

25) A bag contains 4 red balls, 6 yellow balls and 5 green balls, if one ball is chosen randomly. What is the probability that the chosen ball is ..... ?

a) green .....

b) red or yellow .....

26) Draw the triangle ABC where: AB = BC = 5 cm and AC = 8 cm, then draw $\overline{BD} \perp \overline{AC}$ that intersects $\overline{AC}$ at D.

The drawing

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20 Sharkia Governorate – Dirab Negm Educational Zone

1 Choose the correct answer:

1) $\frac{1}{2}$ ..... $\frac{5}{8}$. (< or > or =)

2) 8.4 x 100 = ... (84 or 0.084 or 840)

3) If $3 \in \{1 + x , 5\}$, then x = ... (1 or 2 or 3)

4) 314 cm = ... dm. (31.4 or 3.14 or 3140)

5) 7.2 x 0.2 ..... 1.44 (< or > or =)

6) $\frac{1}{4} \div 0.5$ = ... (0.5 or 0.25 or 5)

7) 19.6 ≃ ..... (to the nearest units) (110 or 29 or 20)

2 Choose the correct answer:

8) $X \cap X` =$ ..... . (X or U or ∅)

9) $\{2 , 5\} \cap \{25\}$ = ... (∅ or {2 , 5} or {25})

10) $3\frac{1}{2}$ ..... 3.05 (< or > or =)

11) $\{7 , 8\} - \{2 , 8\}$ = ... ({2 , 7} or {8} or {7})

12) The longest chord in a circle is called ..... . (radius or diameter or side)

13) The number of altitude of any triangle = ... (1 or 2 or 3)

14) ∅ ..... {3 , 9} ($\in$ or $\notin$ or $\subset$ or $\not\subset$)

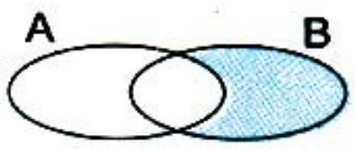
3 Complete:

15) 40 days ≃ ..... weeks

16) $3\frac{1}{2} \div \frac{1}{12}$ = ...

17) 2.7629 ≃ ..... (to the nearest thousandths)

18) If $\frac{x}{3} = \frac{10}{15}$, then x = ...

19) The shaded part of 

represents ..... .

20) The midpoint of any diameter in a circle is called ..... of a circle.

21) The length of diameter in a circle whose radius is 0.5 cm is ..... .

22) When tossing a coin once, then the probability of appearing of a tail = ...

4 Answer the following:

23) If the area of rectangle is 10.25 m^2 and its length is 4.1 m, **find its width** :

The width = ...

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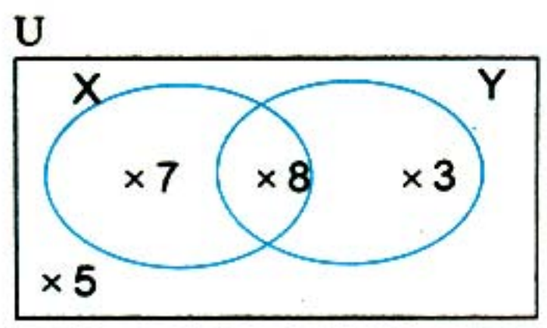
24) Look at the opposite Venn diagram, then complete:



a) X ∪ Y = ...

b) X – Y = ...

25) A card has been randomly drawn out of 9 cards numbered from 1 to 9. Find the probability of getting.

a) An even number **b)** A prime number

26) Draw the triangle ABC in which BC = 6 cm, AB = AC = 5cm, then draw $\overline{AD}$ perpendicular to $\overline{BC}$. Find by measuring the length of $\overline{AD}$.

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21 Ismailia Governorate – Directorate of Education Maths Supervision

1 Choose the correct answer:

1) {4} ..... {1 , 3 , 7} (∈ or ∉ or ⊂ or ⊄)

2) A ∩ A` = ..... . (∅ or A or A` or U)

3) In an experiment of tossing a die once, then the probability of appearing of an even number in the upper face is ..... . ($\frac{1}{3}$ or $\frac{1}{2}$ or $\frac{4}{6}$ or $\frac{1}{6}$)

4) Any chord passing through the center of the circle is called ..... (diameter or radius or straight line or center)

5) 3.245 ≃ ..... . (to the nearest hundredth) (3.26 or 3.24 or 3.25 or 3.255)

6) $\frac{2}{5}$ × ..... = 1 ($\frac{2}{5}$ or $1\frac{1}{2}$ or $2\frac{1}{2}$ or $\frac{5}{5}$)

7) Any triangle has ..... altitude(s). (0 or 1 or 2 or 3)

8) 7.56 × 100 = ... (75.6 or 756 or 75600 or 7560)

9) If {5 , 7} = {m + 1 , 7}, then m = ... (2 or 3 or 4 or 5)

10) 5.4 tons = ... kilograms. (54 or 540 or 5400 or 54000)

11) If A ⊂ B, then A ∪ B = ... (A or B or A` or B`)

12) $\frac{4}{3} \times \frac{1}{2}$ = ... ($\frac{1}{2}$ or $\frac{3}{2}$ or $\frac{2}{3}$ or 1)

13) ∅ ∪ A = ... (∅ or A or A` or U)

14) 2.25 × 4 = ... (88.5 or 520 or 9.85 or 9)

2 Complete:

15) The probability of the impossible event = ...

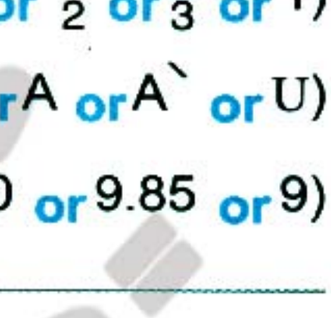
16) To draw a circle of diameter 8 cm we open the compasses ..... cm.

17) The number 84.35 ≃ 84.4 to the nearest ..... .

18) {3 , 4 , 7} ∩ {3 , 5 , 7 , 9} = ...

19) Using the opposite figure, complete:

$\overline{MC}$ is a ..... in the circle M.



20) $3\frac{1}{2} \div \frac{7}{4}$ = ...

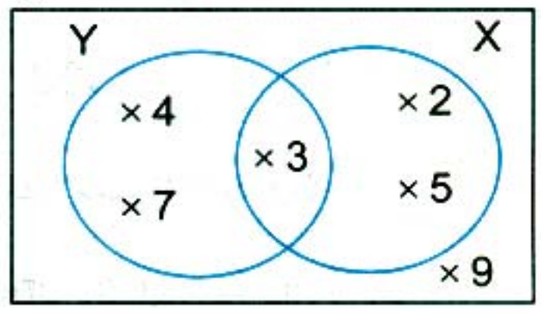
21) If X = {1 , 3 , 4 , 6}, Y = {2 , 4 , 6 , 8}, then X – Y= ..... .

22) If the price of one box of crayon is 6.75 L.E. then the price of 10 boxes of crayons = L.E. ..... .

3 *Find the result:*

23) 95.236 – 76.46 = ... ≃ ..... to nearest hundredth.

24) By using the opposite Venn diagram, find:



a) X ∪ Y = ...

b) X` = ...

25) A bag contains 3 white balls, 7 red balls and 5 yellow balls, all of them have the same size. If we choose a ball randomly, then the probability of getting.

a) Yellow ball = ...

b) Not yellow ball = ...

26) Draw the equilateral triangle whose side length = 5 cm , then draw $\overline{AD} \perp \overline{BC}$.

(Don't remove the arcs.)

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22 Suez Governorate – South Directorate Maths Inspectorate

1 Choose the correct answer:

1) 55.241 × 100 ..... 552.41 × 10. (>or =or <)

2) $3\frac{1}{2} + \frac{7}{12}$ = ... (6or $\frac{49}{24}$or 4)

3) 3 ..... {303.13}. (∈or ⊂or ∉)

4) Any triangle has ..... altitude(s). (1or 2or 3)

5) The longest chord in a circle is called ..... . (diameteror radiusor chord)

6) If {x + 1 , 5 } = {6 , 5} then x = ... (6or 1or 5)

7) 85.67 – 67.5 = ... (18.17or 22.2or 22.17)

8) 267.532 ≃ ..... hundredths. (277or 276.53or 267.5)

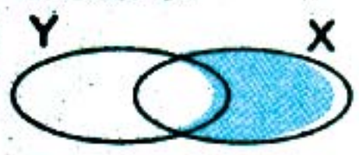
9) If X ⊂ Y, then X ∪ Y = ... (Xor Yor ∅)

10) The number of the subsets of {4 , 5} equals ..... . (3or 4or 5)

11) The probability of the sure event is ..... . (0or $\frac{1}{2}$or 1)

12) 225 ÷ 25 = 2.25 ÷ ..... . (0.25or 2.5or 25)

13) 572.4 cm ≃ ..... meters. (572or 6or 60)

14) The shaded part of 

represents ..... (X ∩ Yor Y – Xor X – Y)

2 Complete the following:

15) 3.75 X 1000 = ...

16) Δ ABC is an equilateral of side length 6 cm, its perimeter = ... cm.

17) {3 , 2 , 4} ∩ {13 , 4 , 20} = ...

18) If U = {1 , 2 , 3 , 4 , 5} , A = {2 , 4}, then A` = ...

19) Half of year = ... months.

20) 39.76 ≃ ..... to the nearest units.

21) If the length of the longest chord in the circle is 10 cm, then its radius = ... cm.

22) As tossing a coin once, then the probability of appearing of a head is ..... .

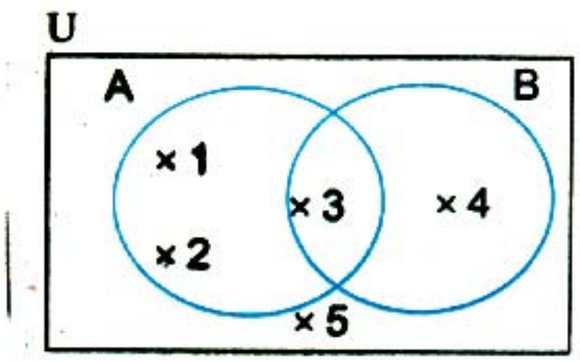
3 Find the result:

23) Arrange in ascending order:

$3\frac{1}{4}$, 3.3 , 3.125 , $3\frac{1}{2}$

The order is: ..... , ... , ... , ... , ...

24) In the opposite figure, find:



a) A ∩ B = ...

b) $(A - B)'$ = ...

25) As throwing a fair die once find the probability of:

a) appearing of a number greater than 6.

b) appearing of a number 5.

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26) Draw Δ ABC in which AB = 7 cm, BC = 6 cm and AC = 5 cm

The drawing

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23 South Sinai Governorate – Educational Directorate – Tur Sinai Educational Zone

1 Choose the correct answer:

1) 98.7 × 100 ..... . (9.87 or 987 or 9870 or 0.987)

2) 736.592 ≃ 736.59 approximated to the nearest ..... .

(ten thousandths or tenths or hundredths or thousandths)

3) If {2 , 3 , 4} = {3 , 4 , x} then x = ... (1 or 2 or 3 or 4)

4) Any chord that passes through the center of the circle is called ..... .

(straight line or diameter or radius or ray)

5) 11664 ÷ 216 = ... (50 or 54 or 58 or 62)

6) {5} – {1 , 2 , 5}= ..... . ({5} or {1} or {1 , 2} or ∅)

7) 37.4289 – 14.081 ≃ ..... to the nearest thousandths.

(23.349 or 23.350 or 23.348 or 23.248)

8) If X ⊂ Y , then X ∩ Y = ... (X or {0} or Y or ∅)

9) The number of altitudes of any triangle is ..... . (1 or 2 or 3 or 4)

10) {1 , 7} ..... {0 , 1 , 2 , 3 , 4 , ... }. (∈ or ∉ or ⊂ or ⊄)

11) 75.3 ÷ 100 = ... (7530 or 753 or 7.53 or 0.753)

12) $\frac{1}{2}$ ..... $\frac{1}{3}$. (≤ or < or > or =)

13) 5.45 ÷ 0.5 = ... (1.9 or 19 or 10.9 or 1.09)

14) The number of sets that includes subsets of the set {5} is ..... (0 or 1 or 2 or 3)

2 Complete the following:

15) 2.4 dm = ... cm

16) $\frac{1}{3} \times \frac{2}{5} = \frac{\text{.....}}{\text{.....}}$

17) A circle whose diameter length is 4 cm, then the length of its radius is ..... cm.

18) {1 , 2 , 4} – {2 , 4 , 6} = ...

19) $\frac{b}{8} = \frac{15}{24}$, then b = ...

20) The longest chord in a circle is called ..... .

21) If X = {1 , 2 , 5 , 7} , Y = {1 , 5 , 3}, then X ∩ Y = ...

22) The probability of the certain event = ...

3 Answer the following questions:

23) If the price of one meter of cloth is 6.45 pounds, then what is the price of 2.4 meters of the same cloth?

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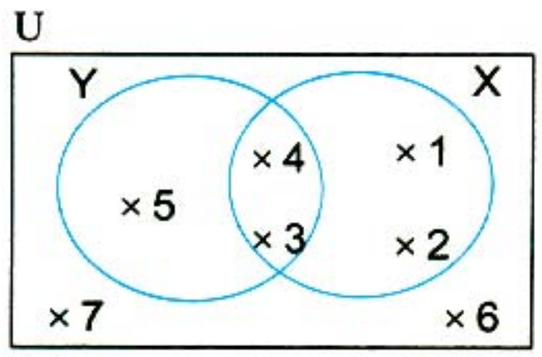
24) By using the following Venn diagram, find the following sets by listing method:



a) X ∩ Y = ...

b) Y` = ...

25) Draw the triangle XYZ in which XY = YZ = 7cm , XZ = 4 cm

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26) A bag contains 5 white balls, 9 red balls, and 6 black balls all of them are identical, a ball is drawn blindly, then what is the probability that the drawn ball is a white?

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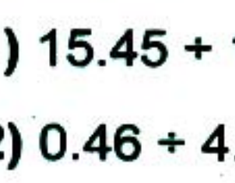
24 Beni Suef Governorate – Directorate of Education – Directorate of Official Lang. Schools

1 Choose the correct answer:

1) If {7 , 10} ⊂ {10 , x + 4}, then x = ... (3 or4 or5 or6)

2) {52} ..... {5 , 2}. (∈ or∉ or⊂ or⊄)

3) 

The shaded part is ..... . (X∩Y or X∪Y or Y – X or X⊂Y)

4) Y – Y = ... (∅ or zero or {0} or {1})

5) ∅ ..... {9} (∈ or∉ or⊂ or⊄)

6) The longest chord in the circle is called ..... . (diameter or radius or angle or side)

7) The number of altitudes in the acute-angled triangle = ... (1 or2 or3 or4)

8) $\frac{1}{4}$ = ... (0.25 or0.125 or0.75 or0.175)

9) $9\frac{3}{4} \simeq$ ..... to the nearest tenth. (9.8 or9.11 or9 or0.9)

10) 3.75 × 1000 = ... (3.75 or375 or0.0375 or3750)

11) 15.45 ÷ 10 = ... (15.45 or1.545 or0.01545 or0.1545)

12) 0.46 ÷ 4.6 ..... 0.01 (< or> or=)

13) $\frac{3}{5}$ ..... $\frac{6}{10}$. (< or> or=)

14) 7.3 km = ... m (7.3 or73 or730 or7300)

2 Complete the following:

15) The midpoint of any diameter in a circle is ..... of the circle.

16) The circle its radius = 2 cm, then its diameter = ... cm.

17) {2 , 5} ∪ {2 , 3} = ...

18) The probability of the impossible event = ...

19) The number 4.6798 ≃ ..... to the nearest thousandth.

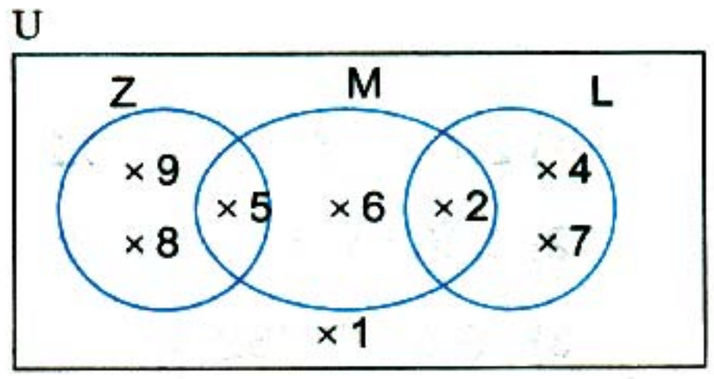
20) 22 days ≃ ..... weeks

21) 2.4 x 1.1 = ... ≃ ..... to the nearest tenth.

22) If 6 ∈ {2 , x} then, x = ...

3 Answer the following question:

23) In the opposite Venn diagram find by listing method:



a) Z ∩ L = ...

b) M ∪ L = ...

c) L – M = ...

d) M` = ...

24) Arrange the following numbers in descending order.

$\frac{1}{9}$, $\frac{1}{6}$, $\frac{1}{3}$, $\frac{1}{7}$

The order is: ..... , ... , ... , ...

25) Draw a circle whose center is M and radius = 2 cm

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26) From the table, find the probability that a pupil plays basketball

Game	Football	Basketball	Handball
Number of pupils	50	40	10

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